

DOCUMENT RESUME

ED 027 243

SP 002 120

By-Stiles, Lindley J.; And Others

Teacher Certification and Preparation in Massachusetts.

Massachusetts Advisory Council on Education, Boston.

Spons Agency-Massachusetts Advisory Council on Education, Boston.

Pub Date Jul 68

Note-435p.

Available from-Public Document Div., Secretary of State's Office, Room 116, The State House, Boston, Mass. (\$1.25; check payable to Secretary of the Commonwealth).

EDRS Price MF-\$1.75 HC-\$21.85

Descriptors-Certification, *Educational Improvement, Field Experience Programs, Instructional Staff, *Interinstitutional Cooperation, Paraprofessional School Personnel, Performance Criteria, Professional Personnel, Recruitment, Specialists, Staff Role, State Departments of Education, State Legislation, State Standards, *State Surveys, *Teacher Certification, *Teacher Education, Teacher Experience, Teacher Interns, Teacher Qualifications, Teacher Shortage.

Identifiers-*Massachusetts

The first section of this report presents (1) an overview of a "comprehensive investigation of ways to improve the certification and preparation of educational personnel in Massachusetts"; (2) a one-chapter discussion with recommendations on each of four focal issues: personnel for education services, personnel certification, reform of teacher education, and state responsibility and leadership; (3) a timetable for suggested actions by the state court, board of education, colleges and universities, school systems, and professional organizations. The second section contains methodology description and data gathered from several sources: 190 school superintendents; a study of teacher qualifications; visits to 51 public and non-public institutions offering teacher education programs; three state-wide advisory conferences each attended by 200 representatives from schools and colleges, education agencies and organizations, and lay groups; an attitudes inventory sent to randomly selected samples of educational personnel and citizens including teachers, principals, supervisors, parent-teacher associations, and college professors; studies from other states; and nationwide proposals. Included are project committee meeting reports, conference programs and group reports, position papers by consultants, questionnaire results with related statistics, and papers and correspondence from interested groups. (JS)

ED0 27243

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

TEACHER CERTIFICATION AND PREPARATION IN MASSACHUSETTS

STATUS, PROBLEMS AND PROPOSED SOLUTIONS Report Number 1

by

**DR. LINDLEY J. STILES
NORTHWESTERN UNIVERSITY**

PROCEEDINGS, RESEARCH AND POSITION PAPERS Report Number 2

A Study of the Massachusetts Advisory Council on Education

JULY, 1968

**182 TREMONT STREET
BOSTON, MASSACHUSETTS 02111**

SP002120

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

Members of the Council:

Hazen H. Ayer, Chairman of the Board, Standish, Ayer & Wood, Incorporated,
Boston

Philip C. Beals, Trustee, Worcester

Lucy W. Benson, Vice-Chairman, The Advisory Council, Second Vice-President,
The League of Women Voters, Amherst

Shirley R. Lewis, Attorney, Lewis & Lewis, Taunton

Paul Parks, Partner & Engineer, Associate Architect & Engineer, Boston

Norman S. Rabb, Chairman, The Advisory Council, retired Senior Vice-
President, Stop & Shop, Boston

Walter J. Ryan, Business Manager, International Union of Operating
Engineers, Local #4, Brighton

Nina E. Scarito, M.D., Pediatrician, Methuen

John S. Sprague, Ph.D., Senior Vice-President, Research & Development,
Sprague Electric Company, North Adams

Legislative Consulting Committee:

Senator Mary L. Fonseca, Fall River

Senator Kevin B. Harrington, Salem

Senator John M. Quinlan, Dover

Senator William L. Saltonstall, Manchester

Representative Robert A. Belmonte, Framingham

Representative Joseph C. DiCarlo, Revere

Representative Paul J. Sheehy, Lowell

Representative Thomas C. Wojtkowski, Pittsfield

Council Staff:

Dr. William C. Gaige, Director of Research

Dr. Lawrence E. Fox, Senior Research Associate

TEACHER CERTIFICATION AND PREPARATION IN MASSACHUSETTS

Study Committee Members:

Sister M. Agnello, Chairman, Department of Education, Regis College

Dr. Dwight Allen, Dean, School of Education, University of Massachusetts

Sister Ann Augusta, Chairman, Department of Education, Emmanuel College

Mr. Philip Beals, Advisory Council on Education

Mr. Alton Cavicchi, Executive Secretary, Massachusetts Association of
School Committees

Mr. Douglas Chandler, Associate Commissioner, State Department of Education

Mr. Richard Clark, Teacher, Newton High School

Dr. Jack Childress, Dean, School of Education, Boston University

Mr. Joseph Durkin, President, Massachusetts Association of Elementary School
Principals

Mr. Girard D. Hottleman, Staff Consultant, M.T.A.

Dr. James Koerner, Education Writer

Mrs. Shirley Lewis, Advisory Council on Education

Dr. George Madaus, Director of Research, Boston College

Dr. Justin McCarthy, President, Framingham State College

Dr. John O'Neill, Associate Commissioner, State Department of Education

Rev. Patrick J. O'Neill, Superintendent of Schools, Diocese of Fall River

Dr. David Purpel, Director, Programs in Teaching, Harvard Graduate School
of Education

Mrs. Charlotte Ryan, Chairman, Massachusetts Conference Board

Senator William Saltonstall, Advisory Council on Education

Miss Ruth Southwick, N.E. Regional Director NEA-DCT

Dr. Robert I. Sperber, Superintendent of Schools Brookline

Mr. Ralph O. West, Director of Evaluation, Commission of Independent
Secondary Schools

Mr. William R. Wright, Superintendent of Schools, Greenfield

Mr. Albert C. Williamson, Chairman, Professional Development Committee, M.S.C.A.

Study Staff:

Dr. Lindley J. Stiles, Northwestern University, Director of Study

Dr. William C. Gaige, Executive Director, M.A.C.E., Chief Administrative Officer for the Council

Dr. Lawrence E. Fox, Senior Research Associate, M.A.C.E.

Dr. Phyllis L. Devine, Boston University, Coordinator of Research

Mr. Albert W. Mayers, Research Associate

Consultants:

Dr. Louis P. Aikman, Associate Professor, Foundations of Education Department, Boston University School of Education

Dr. James F. Baker, Assistant Commissioner of Education

Dr. Robert Bond, Dean, State College at Boston

Dr. John F. Bowler, Registrar, Framingham State College

Dr. Stephen J. Clarke, Chairman, Department of Education, Regis College

Dr. Donald T. Donley, Dean, School of Education, Boston College

Mr. Edward Downey, Consultant, Massachusetts Teachers Association

Dr. Roy Edelfelt, Director, T.E.P.S., N.E.A.

Dr. James Gilbert, Director, Office of Educational Resources, Northeastern University

Miss Elaine M. Hardie, Chairman, Professional Preparation Committee of the Massachusetts Foreign Language Association

Dr. Demetrius S. Iatrides, Director, Institute of Human Sciences, Boston College

Dr. Frederick H. Jackson, President, Clark University

Dr. James Koerner, Education Writer

Dr. Alvin P. Leirheimer, Director, Teacher Education and Certification, New York State Department of Education

Mr. John P. McGrail, Director of the Division of Teacher Certification and Placement

Dr. Donald W. Meals, Director, Educational Systems and Applications, Raytheon

Consultants - continued

Dr. Gabriel Ofeisch, Director, Center for Educational Technology, Catholic University of America

Dr. Harlan D. Philippi, Associate Dean, Director of Graduate Studies, Boston University School of Education

Dr. Gene D. Phillips, Chairman, Foundations of Education Department, Boston University

Dr. David Purpel, Director, Programs in Teaching, Harvard Graduate School of Education

Dr. Robert J. Sperber, Superintendent of Schools, Brookline, Massachusetts

Dr. Gilbert M. Wilson, Chairman, Department of Curriculum and Instruction, Boston University School of Education

Dr. Jerrold Zacharias, Professor, Massachusetts Institute of Technology

PREFACE

The report on the Study of Teacher Certification and Preparation in Massachusetts represents a year of intensive research and wide-spread involvement. Dr. Lindley J. Stiles, author of Report Number 1 and Director of the Study, envisioned this involvement as the key to the successful completion of the study and acceptance of the findings and proposals, as well as lending support to the implementation of the recommendations.

Throughout the study, the staff was fortunate to have the close co-operation and assistance of the State Department of Education and the Massachusetts Advisory Council on Education. The staff is, indeed, grateful to these personnel who facilitated the gathering of statistics and data so vital to the study.

The members of the Study Committee who gave so generously of their time contributed in no small way to the clarification of the problems and the final summarization of the recommendations.

Particularly helpful and valuable were the reactions and suggestions of the many consultants who voluntarily prepared papers and/or presented their ideas at the conferences and the Study Committee sessions.

The response to the questionnaires from the several professional groups indicated a high degree of interest in and concern for teacher certification and preparation within the state. The data from these questionnaires gave clear evidence of the attitudes and thinking of those who are closest to the problems.

While it was necessary to put certain limitations on this year's study in order to fulfill the requirements of the original proposal, suggestions

and concerns of the several specialized professional groups were greatly appreciated and have been included with the proceedings.

The reception and time accorded the different members of the study staff on the various college and school campuses were evidence of the support to be found among teacher preparation faculties for the need for change in certification procedures and in teacher education programs.

The reader who wishes to understand and thoroughly examine the problems of certification and teacher education, along with the recommendations for the improvement of the educational system in Massachusetts, will be impressed by the total involvement and agree that this has been truly a "team approach".

Phyllis L. Devine,
Coordinator of Research

TABLE OF CONTENTS

REPORT NUMBER I

STATUS, PROBLEMS AND PROPOSED SOLUTIONS

Introduction	...	by Dr. William C. Gaige.....	1
Preface	...	by Dr. Lindley J. Stiles.....	4
Overview of Findings and Recommendations.....			8
Chapter 1	...	Personnel for Education Services.....	21
		Recommendations and Suggestions.....	46
Chapter 2	...	Certification of Educational Personnel.....	48
		Recommendations and Suggestions.....	67
Chapter 3	...	The Reform of Teacher Education.....	73
		Recommendations and Suggestions.....	94
Chapter 4	...	State Responsibility and Leadership.....	100
		Recommendations and Suggestions.....	117
Chapter 5	...	Time Table for Actions.....	121

REPORT NUMBER II

PROCEEDINGS, RESEARCH AND POSITION PAPERS

Chapter 1	...	The Proposal and Calendar Schedule.....	133
Chapter 2	...	Study Committee Meetings.....	145
Chapter 3	...	Conference Programs and Group Reports.....	158
Chapter 4	...	Position Papers.....	173
Chapter 5	...	Questionnaire Results and Related Statistics.....	307
Chapter 6	...	Papers and Correspondence from Interested Groups.....	362
Appendix	...	General Laws Relating to Education.....	413

INTRODUCTION

The existence of a qualified and sufficient teaching force -- of education professionals in all categories -- is a basic requirement of a good system of education in Massachusetts. As the Willis-Harrington Commission noted, Massachusetts, in 1951, was the last among the states to institute a state system of teacher certification and that its certification requirements were low and rigid. Because of these circumstances, the Commission recommended that:

"a major project for the Advisory Council on Education be a further review of present certification processes and the design of policy and procedure suggestions to improve the certification of educational personnel. This project should include consideration of the appropriate role of the state in the certification process, the appropriate legal standards to be set for certification, the appropriate role of institutions of higher education in the certification process, the kinds of certification to be provided, and related matters. It is the recommendation of this Commission that the Advisory Council seek the assistance and advice of academic and teacher education specialists in public and private institutions of higher education and of personnel managers in government and in business, that the Council seek the assistance and advice of the State Department of Public School Education, that it prepare its suggestions as a coherent, practical and forward-looking proposal, that it communicate its proposal as a whole to the Board of Public School Education and to the Board of Higher Education within eighteen months of the formation of the Advisory Council, and that pending the submission of this proposal no extensive alterations in present certification be undertaken by the Department of Education."

While the Advisory Council was appointed in December, 1965, it did not have a staff until November, 1966. Now in May, eighteen months after the Director took office, a major study of teacher certification and teacher education in the state has been completed and this report published.

As the Council staff approached the problems of teacher certification, it became increasingly clear that certification cannot be separated from the initial and in-service education of teachers. The assurance of a high quality teaching force can only be gained where the state, the colleges and

universities and the school systems themselves are systematically related in both planning and carrying out programs of preparation and certification. Thus, the Council resolved to broaden the study to include all facets of the formation and maintenance of our teaching force.

Again, the Willis-Harrington Commission reported that "the Council ... has been designed to pull in from all parts of the nation the finest experts and consultants it can find whose frames of reference are the problems themselves, not their conditions in Massachusetts."

The Council chose as the director of this, one of its first two major studies, Dr. Lindley J. Stiles, professor of education for interdisciplinary studies at Northwestern University and the former dean of the School of Education at the University of Wisconsin. Dr. Stiles is one of the country's "finest experts" in teacher education and certification. With the excellent assistance of Dr. Phyllis L. Devine and Mr. Albert Mayers of Boston University, and with the splendid facilities and services of that university, the Director has seen that the study has done all of the things suggested above by the Commission -- and more. The profession, public and private, representatives of colleges and universities, of boards, commissions and departments, of professional organizations, even of severe critics -- all have participated and contributed.

Everyone of the 51 teacher education programs in the state qualifying students for certification was visited. Outstanding scholars from universities and school systems, the New York and Massachusetts State Departments of Education, the TEPS Commission of NEA contributed of their time, wisdom and experience.

Out of all of these activities has come a remarkable consensus that the systems of teacher certification in the country and of student teaching are inadequate and that new and more functional systems must be devised -- systems which require the active participation of the State Department of Education, colleges and universities and school systems, of scholars and teachers, yes, and of teachers associations and unions.

On behalf of the members and staff of the Advisory Council and of the legislators who created it and gave it funds, I present this study to the people of Massachusetts and their political and professional representatives. What is recommended is difficult, complex, and the part regarding student teaching, is expensive. But the education of our children, youth and teachers is of overriding importance to each individual and to our state society as a whole. Massachusetts has been first and superior in education matters through most of its 350 year history. In the area of teacher certification and teacher education, it has the opportunity to be first and best again upon implementation of the recommendations of this report.

William C. Gaige
Director of Research
The Advisory Council on Education

PREFACE

The certification and preparation of educational personnel are more than professional matters; since they relate directly to pupil learning they properly are the concern of all. Hence, this study should be of interest to citizens as well as educators. To reach as many readers as possible, three types of reports are being made.

1. The gist of the findings and recommendations is included in a brief "Overview," at the beginning of this Report Number I. It can be read in just a few minutes.
2. A more complete, yet still concise, presentation of the status, problems and suggested solutions form the rest of this first report. It includes a minimum of detailed data and places recommendations and suggestions at the end of each chapter for quick reference. A final chapter presents a time-table for making the suggested changes. One can scan the entire report in thirty minutes or read it carefully in a couple of hours or so.
3. A second report, published separately, includes a complete record of the study, position papers presented by consultants, digests of ideas and suggestions generated, the data gathered, and a record of the work of the staff and Study Committee. It will be of interest to all who want to examine more thoroughly the problems of certification and preparation of educational personnel in Massachusetts.

The ideas and suggestions included in these reports came from numerous agencies and individuals. Many were developed by members of the Study Committee who provided advice, interpretations and judgments throughout the investigation. Some were contributed by consultants who helped with three Advisory Conferences. Others were presented to the Study Committee by representatives of various lay

and professional groups, schools, institutions of higher learning and the State Department of Education. Still others came from individuals who attended the Advisory Conferences or who responded to the various questionnaires used to learn what is happening and what people think should be. Many persons reported ideas that were similar, but perhaps no single interpretation of any one would have unanimous support.

The Study Committee considered and reacted to the ideas collected as well as to the proposals included in this report. There was rather remarkable agreement that new approaches to certification are needed, a position supported almost unanimously by over two hundred persons who were in attendance at the Third Advisory Conference. Samplings of attitudes suggest that widespread endorsement prevails for Massachusetts to provide at the state level financial support and leadership to improve the clinical training of teachers. All members of the Study Committee favor school and college partnerships to test ways to redesign learning for students. Together these institutions should differentiate the roles and responsibilities of teachers within instructional teams that make use of para-professional personnel and the resources of educational technology. They should test ways to protect against obsolescence in educational programs. Also, relevant approaches to preparation for various educational positions should be built into the research. Such goals, incidentally, are given high priority for the Education Professions Development Act passed by the U.S. Congress. Also, support for these ideas was found to be generally positive among teachers, school officials, professors and administrators in institutions that prepare educational personnel, state department leaders and citizens who helped with the investigations. Where differences of opinion were revealed, they tended to relate more to how the changes might be made to work in Massachusetts rather than to whether they should be tried. Such is to be

expected, since with anything new no one can lay out precise prescriptions for its operation; the need is for agreement on goals and approaches with freedom and inclination to experiment.

As Director of the Study, I take full responsibility, but not the credit, for the analyses of conditions, interpretations of data and final recommendations made. My purpose in doing so is to relieve other members of the staff and those who served so faithfully on the Study Committee from the obligation of complete endorsement of specific interpretations or proposals, some of which, no doubt, reflect strongly my own views. In reality, however, this has been a team project -- one that enlisted widespread participation from representatives of both public and non-public schools and colleges, key professional groups, state officials and representative citizens of Massachusetts. All along, the objective has been to project new ideas that promise to work better, rather than to defend the status quo for its own sake or merely to negotiate compromises between competing interests. Throughout, it has been agreed that new conceptions and approaches to certification and preparation of educational personnel are needed. Thus, the focus has been on defining a change of direction rather than deciding how present processes may be improved.

Credit for the success of this study properly should go to hundreds of educators and lay citizens who reported ideas and attitudes as well as information. Consultants who presented position papers to the three Advisory Conferences as well as those who reacted to each presentation were indispensable catalysts to creative thinking about better ways to certify and prepare teachers. Other contributions were made by key spokesmen for various points of view who presented their ideas to the Study Committee. Schools, colleges, universities, the State Board of Education, the Executive Office for Administration and

Finance, the Division of State Colleges, the Association of Private and Independent Schools, and representatives of Catholic elementary and secondary schools as well as the Advisory Council itself -- all provided valuable information and assistance. The Division of Research and Development of the State Department of Education made available information from its data banks that otherwise would have been impossible to collect within the time and resources available.

Appreciation is expressed particularly to Dean Jack Childress and the School of Education of Boston University for making available its staff and facilities to help with the study. Not only did it carry the contract for the project and provide personnel to conduct the research, Boston University served as host for the three Advisory Conferences and various meetings of the Study Committee. Special thanks go to Dr. Phyllis Devine, Boston University School of Education, who served as Coordinator of Research for the project. Mr. Albert Mayers, Research Associate, also made contributions beyond the call of duty. Dr. William Gaige, Director of Research for the Massachusetts Advisory Council on Education, which sponsored the study, participated actively in all phases of the work and contributed vital suggestions that have become a part of this report. Dr. Lawrence Fox, Senior Research Associate for the Council, also provided assistance. A final word of thanks goes to Northwestern University whose national and worldwide commitments to improve teacher education have made possible a unique type of appointment that has permitted the Director to participate in this study.

Lindley J. Stiles
Director

TEACHER CERTIFICATION AND PREPARATION
IN MASSACHUSETTS

- - - - -

"Status, Problems and Proposed Solutions"

- - - - -

Report Number I

-

Overview:

Massachusetts schools -- both public and non-public -- confront deficiencies in educational personnel that are multi-dimensional. Not enough teachers are available. The quality of preparation of many is minimal. The variety of specialized personnel required to staff different kinds of schools is insufficient. The capabilities of many teachers do not match the jobs that need to be performed in schools. The numbers of experienced teachers available, and retainable, are too small to guarantee stability in many school programs.

Predictions for the future suggest that even with the increases in college graduates expected, the competition for the kinds of high ability persons needed for teaching will perpetuate the shortages of educational personnel. Improved programs of recruitment, certification and preparation, as well as better salaries and working conditions are vital and will help. They likely, however, can do little more than to assure that education will not fall further behind in the race for talent. To staff schools in ways that assure quality education for all pupils ways must be found to tap other sources of manpower, such as para-professional workers, specialized technicians, and professionals in cognate fields. In addition, full use must be made of educational technology.

Present standards and procedures for certifying educational personnel in Massachusetts are inadequate. They fail to guarantee that all licensed to practice in various educational positions will be competent. Nor do they differentiate between levels of professional performance. No provision is made to protect against professional obsolescence. The emphasis on specific course requirements tends to block experimental efforts to improve teacher education in colleges and also repels some able persons from entering educational work. Some qualified and experienced teachers from other states and countries find it difficult or impossible to be licensed in Massachusetts. The existing system of certification may operate, at least in public schools where licenses are required, to reduce the supply and in some ways the quality of educational personnel -- an outcome the opposite of its intended purpose.

Massachusetts was the first state to develop college programs to prepare specifically for teaching. Some institutions of higher learning located within the State have continued to pioneer in this area. Others have moved in this direction in recent years. In general, however, a gap exists between the kinds and quality of educational personnel being prepared and the needs of schools that now confront many new educational problems. Programs of preparation are handicapped by the absence of job descriptions and general agreements relative to differentiations in levels of professional performance as well as the lack of opportunity for advancement of instructional personnel. Failure to devise systems to keep educational programs up to date and self-renewing represents an added limitation on programs of preparation for the educational professions.

Improving the certification and preparation of educational personnel in Massachusetts will require the cooperation of all concerned. Strong leadership is necessary at the state level. Such can be accomplished within

the unique traditions of local responsibility that prevail in the Commonwealth. State help is needed to assure minimum standards for educational personnel and to provide needed state-wide financial assistance to colleges and universities to improve programs of preparation. The Massachusetts Legislature will need to provide appropriate legislation and certain kinds of financial support. A suitable agency needs to be developed by the State Board of Education to provide leadership, to achieve appropriate involvement of various concerned groups, to develop common minimum standards for certification, to encourage experimentation to improve teacher education and to administer certain kinds of financial support. Authority to act and freedom from politics -- both from within and outside the education professions -- will be essential to its success. Effective staff leadership will be vital too. Imperative will be the attainment of cooperation from non-public as well as public colleges and universities, since Massachusetts as much as any other state depends on both kinds of institutions for its supply of educational personnel. Academic scholars who are responsible for the general education and subject specialization of teachers, as well as specialists in education will need to participate. Close partnerships will be required between colleges and elementary and secondary schools if educational progress is to be achieved. Greater responsibility needs to be assumed also by various segments of the teaching professions, especially classroom teachers. Supervisory and administrative personnel should play appropriate roles. Organizations that provide leadership in professional affairs should be properly involved. Also, members of school committees and other interested laymen have contributions to make.

Despite widespread dissatisfactions with present practices in teacher certification and preparation -- for differing reasons, incidentally --,

rather general support prevails for the following basic assumptions that undergird this report.

1. Certification of educational personnel is considered an appropriate and essential obligation of the state. Its function, as in the licensing of professionals in other fields, is to attest the professional competence of various types of educational personnel and to protect the public, e.g. pupils in elementary and secondary schools, from incompetent practitioners. A permit to practice -- which is what certification represents -- should be a guarantee of performance above defined minimum levels for particular kinds of professional responsibilities. Continuation or renewal of a license should carry with it assurances that professional competence is being maintained.

2. The need for educational personnel to be prepared -- both by study and supervised clinical practice -- for specific kinds of professional assignments is incontestable. People are not born with the ability to teach; such must be developed. Additionally, the academic study of a subject in college for given lengths of time is no reliable guarantee of adequate professional performance. Suitable preparation of educational personnel should provide for the mastery of appropriate knowledge and intellectual abilities and also for the development of performance skills. The latter requires extensive supervised clinical practice in assignments for which preparation is aimed.

3. Those who teach should take major responsibility for establishing and maintaining standards and for judging qualifications for professional practice. In doing so, the objective should be to attract and retain in teaching competent persons, rather than arbitrarily to limit the numbers certified.

4. The state, in this instance the Commonwealth of Massachusetts, shares responsibilities with local school districts and institutions that prepare educational personnel to define the kinds and qualities of personnel required and to provide a constant and adequate supply of well-prepared candidates to staff educational programs in both public and non-public schools.

Key recommendations and suggestions of this study, in brief, include the following:

With Respect to Staffing Schools in the Future--

1. Staffing patterns should be redesigned to make full use of various educational specialists, professionals in cognate fields, fully qualified professional personnel, beginning or associate teachers, interns in training, and para-professional personnel. Professional teachers should be in charge of the diagnoses and prescriptions for instruction of all children with the various teaching services performed by appropriate members of the instructional team. Additionally, full use should be made of educational technology.

2. School personnel policies, such as employment qualifications, staffing assignments, salaries, promotion and tenure, should be related to the new differentiated uses of teaching talents. A key objective should be to provide opportunities for appropriate professional contributions, advancement, financial reward and professional prestige within the instructional team.

With Respect to Certification--

1. Certification should be based on knowledge -- of general background, subject specializations and pedagogy itself -- and professional performance, rather than transcript records as at present. The citizenship requirement should be discontinued or made more flexible since it denies schools the services of teachers from other countries.

Notes: (a) In changing the approach to certification, presently employed

and those in preparation should be protected. They should be permitted, however, to seek certification -- initial or renewal -- under the plan herein proposed.

- (b) The present permissive policy regarding certification of teachers in non-public elementary and secondary schools should be maintained. It is hoped, however, that the proposed new approach will attract their voluntary participation.

2. Standards of professional performance should be developed by representative leaders in each field, including scholars in academic and professional areas and teachers in elementary and secondary schools as well as school officials. The objective should be to assure that all licensed to professional practice will have initial and continuing minimum acceptable performance ability at the level certified.

3. Procedures for certification should provide alternate ways to qualify that while assuring adequate performance by all will accommodate differences in individual and institutional programs of preparation. Examples suggested include approved institutional plans for judging knowledge of subject matter and ability to perform, certification by examination that includes performance tests -- administered either by preparing institutions or state credentials committees --, and professional judgements by qualified colleagues in schools and colleges in accordance with established standards approved procedures.

4. The number of licenses issued for various kinds of professional practice, e.g. teaching, counseling or administration, should be kept to a minimum with specialized qualifications of educational personnel attested by academic, experience and performance records rather than by license.

Four levels of licenses are suggested: Internship licenses for those in training; Associate Teacher Licenses for beginning teachers; Professional

Licenses for those who demonstrate ability to handle professional assignments independently of supervision; and Educational Specialists Licenses for high-level teachers and those with particular kinds of specialization, such as counseling, supervision, administration or professionals in cognate fields, e.g. sociology, psychology, or systems analysis. Licenses for para-professional workers will likely be unnecessary unless they are required for employment or otherwise be the practice in a trade field.

5. Provisions should be made for periodic renewals of licenses, without reference to tenure, based on demonstrated maintenance of scholarship and professional competence. Suggested renewal points are: Internship Licenses -- annually; Associate Teacher Licenses -- every three years; Professional and Educational Specialists Licenses -- every seven years.

With Respect to Preparation--

1. The Legislature should appropriate and allocate through the budget of the State Board of Education funds to provide adequate conditions for clinical training of educational personnel, e.g. for student teaching, internships and practicums. Such funds should be used primarily to reimburse school systems that reduce the loads of interns and personnel who supervise those in training (e.g. critic or cooperating teachers) and to provide state personnel to assist preparing institutions in making assignments of prospective teachers to training stations in schools. Some funds may be needed also to reimburse colleges and universities for training school supervisors of clinical practice.

2. School systems and institutions that prepare teachers should be encouraged, and provided financial help, to experiment with ways to redesign systems for student learning in elementary and secondary schools and the preparation of needed personnel -- particularly in situations in which

existing programs are inadequate such as in inner-city or rural schools.

3. Academic professors in colleges and universities, with the assistance of specialists in education as well as teachers and administrators in elementary and secondary schools should work to redesign the liberal arts and subject specializations of prospective teachers to make such studies relevant to the life of the times as well as a base for scholarly development. Attention should be given, particularly, to preparing teachers who are acquainted with new curriculum theories and content.

4. Local school systems, either individually or in cooperation with each other and/or colleges and universities, should provide plans for the in-service development of educational personnel that will ensure continued learning and professional competence.

5. Graduate programs of preparation for specialized educational personnel should: make full use of the academic resources of cognate fields, avoid the national pattern of over-emphasis on professional courses, and make appropriate use of supervised internships to develop and verify needed professional skills. In general, the master's degree should be aimed at improving teaching competence.

With Respect to State Leadership--

1. The General Court should authorize or request the creation of a new sub-division by the State Board of Education to which should be delegated full responsibility for the certification and improvement of educational personnel. Such mechanism, which could be administered similarly to the present Division of Library Extension, might be called a "Commission for Certification and Preparation of Educational Personnel" or some other suitable name. It should be accorded quasi-legal powers to perform its duties and given such other protections as may be needed to guard against

political pressures -- from within and without the education professions. Its composition should provide for appropriate representation of able and respected elementary and secondary school teachers and administrators, academic and pedagogical scholars from colleges and universities as well as key laymen representing school committees or possibly other citizen groups concerned directly with education. Its authority should be to develop standards and procedures for the certification of educational personnel, to certify to the State Board of Education all eligible for licenses, to provide leadership and to coordinate resources for the improvement of teacher education and to administer the plan of support for clinical training proposed by this study. To carry out its responsibilities the Commission should be empowered to employ a professional staff and to create and support various credentials committees needed to establish standards in the different areas of specialization.

2. Departments of the State Board of Education should continue to project the requirements for educational personnel, issue official licenses for various kinds of educational practice, maintain comprehensive data on the personnel licensed, and to assess the effectiveness of educational programs.

3. Increased financial support should be provided for the preparation of teachers in the state colleges and the University of Massachusetts. The objective should be to make the programs of preparation, particularly in the areas of general education and subject specializations, equal to the best in the private colleges. At the present time some state institutions spend less per student annually to prepare teachers than do better high schools to educate their students. Compared to the support provided for provided for preparation for other professions, teacher education is woefully

undersupported, in both public and non-public institutions.

4. The Massachusetts Advisory Council on Education should continue to provide assistance to the Massachusetts Legislature, the State Board of Education, the Board of Higher Education, and other agencies to help enact the recommendations of this report. The Committee that has helped with this study might be asked to continue to provide assistance until the new Commission has been activated.

With Respect to Action on Recommendations--

1. The Massachusetts General Court should modify present certification statutes to: (a) discontinue or otherwise provide greater flexibility for the citizenship requirement; (b) authorize or request the State Board of Education to establish the proposed Commission for Certification and Preparation of Educational Personnel; and (3) to transfer complete responsibility for certification to the new sub-division of the State Board of Education. It will need, also, to appropriate funds to support the new program of certification, the provision of adequate resources for clinical training, and experimentation to improve the preparation of educational personnel.

2. The State Board of Education needs to take the following steps: (1) Establish the Commission for Certification and Preparation of Educational Personnel as a quasi-legal adjunct service; (2) Request funds to support the work of the Commission, including a budget to provide appropriate resources for the clinical training of educational personnel; and (3) define working relationships between existing departments with the new Commission.

3. Teachers and other educational personnel, individually and through their professional associations, need to take responsibility for supporting the needed legislative action assisting the Commission to establish and maintain suitable performance standards for each field and level of certifi-

cation, and help school systems and preparing institutions to improve the preparation of educational personnel.

4. Colleges and universities that prepare educational personnel should move to: (1) project preferred approaches to judging performance of candidates for teaching; (2) cooperate with the proposed state-supported program of clinical training of educational personnel; (3) work with school systems to relate the preparation of educational personnel to new designs for student learning in elementary and secondary schools.

5. School systems should move as rapidly as possible to adapt all personnel policies to the new differentiations of teaching competence. They will need, also, to develop appropriate in-service programs that qualify teachers for higher levels of certification and for the periodic renewal of licenses.

THE STUDY IN BRIEF

The above recommendations have come from a comprehensive investigation of ways to improve the certification and preparation of educational personnel in Massachusetts. Sponsored and financed by the Massachusetts Advisory Council on Education, the study has involved a wide range of information gathering operations that have gone on during the past year. Data on the sources, supply, demand and quality of the State's educational personnel have come from analyses of trends over the past five years, 1961-62 to 1966-67. Information was obtained from 190 Superintendents of Schools in Massachusetts and also from a study made of the qualifications of teachers certified during this period. In addition, visits were made to fifty-one colleges and universities -- both public and non-public -- that offer comprehensive programs of preparation for teachers and other educational

personnel may be improved. A Study Committee, composed of 25 members drawn from various segments of the lay and professional populations, played a key role in this as well as other phases of the study. It advised the staff throughout and helped interpret needs and possibilities. The Committee held hearings to gain the views of representatives of key educational groups. It also sponsored three statewide Advisory Conferences. The first, held on November 18, 1967, dealt with Teachers for Massachusetts -- 1980; the second, the second, on December 9, 1967, focused on The Reform of Teacher Education; and the third, on February 3, 1968, was concerned with the Certification of Teachers. Each of these conferences was attended by about 200 representatives leaders from schools and colleges, including academic as well as pedagogical specialists, various educational agencies and organizations as well as lay groups. Both public and non-public education were represented throughout. The general format followed was to hear the views of selected consultants on each subject and then to provide opportunities in small discussion groups in which participants could give their reactions and suggestions. Key ideas were recorded for analysis by the study staff.

A broader effort to obtain ideas and information involved the use of an attitudes inventory (see Volume II) that was sent to randomly selected samples of educational personnel and citizens. The following groups were included: public and non-public elementary and secondary school teachers and principals, public school supervisors and superintendents, School Committees of public schools, presidents of Parent-Teachers Associations, and college professors of education and liberal arts. In addition, all staff members -- a total of 60 -- above the rank of supervisor in the State Board of Education were polled.

Numerous personal interviews were held by the study director and staff with individuals and committees who represented various public and non-public

educational agencies and organizations. Proposals for certifying and preparing particular types of educational personnel that have been developed by several professional groups and institutions were studied. Also, information was obtained about practices in other states and nationwide proposals. All in all, this is perhaps the most extensive study of teacher certification ever undertaken by any one state. The side-scale involvement of professional and citizen leaders is unique to studies of this type.

Chapter 1

PERSONNEL FOR EDUCATIONAL SERVICES

Public interest in the certification and preparation of educational personnel stems from the high priority given to education today. Changes in society have made schooling the exclusive road to adulthood. In such context, education has become more than a personal privilege; it is now a social necessity. Thus, the extent and quality of education are the responsibility of all. Since the effectiveness of schools depends to a high degree on the personnel provided, all citizens have a stake in decisions about who should teach and how they should be prepared.

SHORTAGES OF QUALIFIED EDUCATIONAL PERSONNEL

The continuing national trend of inadequate supply of qualified teachers and other educational personnel, e.g. librarians, supervisors, counselors and administrators, characterizes schools in Massachusetts -- both public and non-public. As pointed out by Dr. Frederick Jackson, President of Clark University, at the first Advisory Conference, present staffing problems promise to continue into the foreseeable future. The shortages that exist are multi-dimensional, relating to numbers, quality of preparations, diversity of specializations, adaptability to needs of schools, and professional experience. The critical nature of the deficiencies is accentuated by the comparatively low standards that present state certification laws prescribe as adequate. Deficits in numbers and abilities of personnel are made more acute, too, by rising community expectations for better educational results. No longer are parents satisfied with teachers whose major competence is ability to "handle discipline" -- important as order in classrooms is --, they want instructors who are good scholars and capable of adapting knowledge to the maturity levels as well

as cultural backgrounds of individual students. Most of all they expect teachers to understand the learning problems of different kinds of pupils and to be able to inspire the kinds of interest and success in learning that motivate boys and girls to remain in school rather than drop out. In short, staffing levels and patterns that were accepted as standard or adequate a few years ago today are being condemned as obsolete. They will be even less acceptable in the future.

Numbers of Teachers

To understand the complexities of staffing schools, it is necessary to realize the size of the teaching force required. In Massachusetts, it is important to consider the needs of non-public as well as public schools since both types of institutions draw upon available teaching talents. As Table I shows, at the beginning of the school year 1966-67, a total of 57,625 teachers were employed in public and non-public elementary and secondary schools in Massachusetts. They taught a total of 1,319,178 pupils. As the distributions indicate, about one out of five teachers is employed in a non-public - private or parochial - institution.

In terms of numbers alone, did Massachusetts have enough teachers to staff public and non-public elementary and secondary schools? The answer given by school officials is: "No, not if the public wants good quality education for all children." Less than eight percent of public school superintendents reported that over the past five years they have been able to fill all teaching positions with teachers who were fully certified by the State of Massachusetts. The proportion of teachers employed on temporary permits or waivers averaged from six to ten percent each year for the state as a whole. Teachers in public schools had to teach, on the average, classes of 24 pupils in elementary schools and 20 pupils in secondary schools. In

over ten percent of elementary classrooms, however, the pupil-teacher ratio exceeded 30:1. The average for high school classes, e.g. 20:1, compares to the ratio of 16.7:1 recommended by the Willis-Harrington Commission. Pupil-teacher ratios, of course, can only reflect the supply of teachers available. They do not necessarily give an accurate picture of the quality of learning in individual class groups of differing sizes. All factors considered, however, expert opinion holds that a manageable relationship should be maintained between pupil enrollments and staffing levels. Otherwise close attention to problems of individual pupils may become difficult. A priority to be honored in any staffing plan is for all instructional decisions for all pupils to be made by fully qualified and competent professional teachers. If pupil-teacher ratios become so large that such is impossible, educational quality will deteriorate.

What about the supply of other kinds of educational personnel? The shortages in numbers is repeated over and over again: not enough well-prepared administrators; more librarians needed; deficits in teachers of handicapped pupils; too few guidance counselors; supervisors in scarce supply; and classroom teachers competent and willing to supervise student teachers and interns difficult to find.

Such numerical shortages can be expected to become more serious as higher education, adult education, research agencies, government, business and industry increase pressures to recruit personnel from elementary and secondary schools. A further drain on teaching talent comes from the traditional demand for specialists in supervision, counseling and administration. Marriage of women and military service for men can be predicted to continue to reduce the supply of educational personnel available.

TABLE I

PUBLIC AND NON-PUBLIC ELEMENTARY AND SECONDARY SCHOOLS,
PUPILS AND TEACHERS IN MASSACHUSETTS -- FALL 1966

<u>Type</u>	<u>Public</u>	<u>Non-Public</u>	<u>Total</u>
Elementary:			
No. Schools	1,881	633	2,514
No. Pupils	*613,941	190,500	804,441
No. Teachers	25,014	6,350	31,364
Secondary:			
No. Schools	515	263	778
No. Pupils	444,717	70,020	514,737
No. Teachers	21,365	4,896	26,261
Totals:			
Schools	2,396	896	3,292
Pupils	1,058,658	260,520	1,319,178
Teachers	46,379	11,246	57,625

* Includes 17,371 special students.

Quality of Teachers Available

More important than numbers is the quality of teachers available. A traditional way to judge quality is by the proportion of the teaching force that meets state certification standards. According to data supplied by the Division of Research of the State Department of Education, approximately eight percent of public elementary and secondary school teachers in 1967-68 were not certified. In some schools, of course, all teachers held certificates; in others as high as thirty percent did not. In addition to those teachers not qualified for certificates, State Board of Education officials estimate that as many as ten percent of secondary teachers had primary teaching assignments in areas in which they were not certified to teach. Since by primary teaching assignment is meant the subject to which half or more of a teacher's time is devoted, many other teachers may have been teaching one or more courses for which they had insufficient academic preparations.

Reports made by superintendents of public schools as a part of this study revealed that over ten percent of last year's public elementary and secondary school teachers were assigned to subjects or grades that they were not prepared to teach. When non-certified personnel and those with mis-assignments are combined, state officials estimate that perhaps twenty percent of students in public schools are receiving instruction from personnel not qualified by certification for such assignments.

Even teachers who qualify for a Massachusetts certificate may not be, as Dr. Robert Bond, of Boston State College, stressed in his testimony to the Study Committee, adequately prepared to teach. Only eighteen semester hours of a college study are required for a major in a field. Other states, typically, require twice as much preparation. Even worse, it is possible

for high school teachers to qualify with only minors in their teaching subjects, which is twelve semester hours of college work -- about half the minimum required in most other states. Teachers in elementary schools are required to have neither majors or minors in academic fields. Professional training, particularly in student teaching, in which only two semester hours are required, may be completely inadequate.

Fortunately, many Massachusetts teachers are better qualified, as judged by numbers of course credits, than state certification standards require. A study of transcripts of a random sample of teachers licensed over the past five years, 1962-67, revealed that the average number of college semester hours in major fields for high school teachers was thirty-seven. High school teachers had earned, on the average, twenty-seven semester hours in education courses. Elementary teachers averaged thirty-four semester hours in education courses.

Performance Capabilities

Often shortages of teachers and other educational personnel relate to the performance capabilities of those available. For example, even teachers who are well prepared on paper may not be qualified and capable of teaching culturally deprived pupils or the content of the new curriculums that scholars have recently developed.

Superintendents of public school systems reported that a third of beginning teachers employed, all of whom are fully certified and expected to carry regular assignments as teachers, are not really ready to take full responsibility for teaching. Inability to manage classrooms and failure to understand differences in children were the major weaknesses noted. Lack of knowledge about learning and teaching and poor knowledge of content to be taught were other deficiencies listed, in that order.

Of all teachers employed -- both new and experienced -- thirty-six percent were reported poorly prepared to deal effectively with the cultural and psychological differences of various types of students. A similar percentage was judged unable to translate new knowledge into school programs of instruction. Such deficits in performance capabilities may be due to the kinds of preparation received or to the attitudes held toward professional work. Many teachers have not taken the kinds of courses, in such behavioral sciences as anthropology, sociology, psychology, economics or political science, that would help them to understand the life and problems of different kinds of people. Their professional training may not have prepared them to accept disadvantaged children or to make the modifications in instructional materials and teaching techniques that are essential in inner-city or rural schools. Many, no doubt, have been conditioned against working with the kinds of children who need help most. Their goal is to find employment in suburban schools where children tend to learn with little assistance from instructors.

Inability to adapt to new ways of organizing instruction -- such as team teaching, the use of televised lessons, electronic tape facilities or even simple audio-visual aids -- is another failure of many teachers who are well qualified by transcript records. As Dr. Gabriel D. Ofiesh pointed out to the first Advisory Conference, in an age of atomic energy and aerospace explorations, schools are still using "horse and buggy" techniques. Superintendents of public schools in Massachusetts reported that forty percent of teachers in service cannot make effective use of the new instructional technology in their teaching. Elementary teachers, particularly, often are conditioned against modifications in the so-called "self-contained" class room that requires each teacher to teach all skills and subjects -- an impossible task for most.

Too Few Experienced Teachers

It is difficult, if not impossible, to maintain high quality in educational programs when schools must operate with patterns of high turnover of teachers and too few experienced teachers to maintain stability. Data provided by the State Board of Education indicates that on the average, Massachusetts public schools experience a twenty percent turnover each year. Forty percent of all new teachers who come into Massachusetts schools leave the profession within five years: twenty to thirty percent more are estimated to move from school to school within this period. Some schools have as high as sixty percent turnover in one year. Some may have as few as ten percent of their teaching forces that remain constant over a decade. Even in urban school systems where patterns of tenure are longer the turnover problems are serious. Traditionally, city teachers seek transfer away from inner-city schools to more prestigious positions.

With teachers salaries low and the time required to achieve maximum pay scales relatively short, many teachers find that they are forced by their growing economic responsibilities to move out of the classrooms into supervision, counseling or administration to increase their incomes. Others move out of educational work altogether.

The net impact of teacher turnover on some schools is lack of continuity of staff and unstable relationships between school, pupil and community. For education as a whole, the small proportion of experienced teachers has mitigated against the development of high level professional services. As a consequence, the beginning teacher in a school is assumed to be exchangeable with the person of ten or twenty years experience.

Diversified Specialization of Personnel

The quality of educational programs suffers from the lack of various kinds of specialists needed in modern systems for learning. School systems

have difficulty finding leadership for instructional teams, specialists in programmed instruction, experts in the new media, and good scholars in different subject fields. They may not be able to find librarians, supervisors who have advanced beyond the generalist level, or guidance counselors and administrators who have high level preparations for such work. Professionals in the behavioral sciences are difficult for school systems to attract. Data processing personnel are scarce and too expensive for many school budgets. Nor is there an adequate supply of persons capable of organizing and directing educational research and experimentation. Another serious deficit is in the category of teachers capable of supervising the clinical training of student teachers and interns.

SOURCES OF EDUCATIONAL PERSONNEL

In theory, each state should prepare a sufficient number of teachers to supply the needs of its schools. With mobility patterns that exist, exchanges of personnel with other states are to be expected and are, no doubt, beneficial. Massachusetts is a state that exports teachers, due primarily to the national character of many of its private institutions of higher learning. Actually, the total teacher production (now about 7,600 annually) could be employed at home. Because many go to other states, however, it is necessary to import a sizeable portion of the educational personnel required to staff schools in Massachusetts. Because of migration patterns of educational personnel, over a fourth of the teachers employed in elementary and secondary schools in Massachusetts come from other states. At the secondary school level the percentage approximates one-third of the total. Over one-third of the superintendents of schools and senior high school principals are prepared in other states. Twenty-seven percent of the junior high school principals and seventeen percent of elementary school principals are outsiders

by origin. Over half of the heads of departments in secondary schools have been recruited from other states as have more than sixty percent of the curriculum specialists and about twenty-five percent of the guidance counselors.

With respect to the types of institutions, regardless of location, preparing educational personnel employed in Massachusetts, non-public colleges and universities carry a heavy responsibility. About thirty-eight percent of elementary teachers were trained in non-public institutions which compares to about fifty percent who are products of the state colleges. Twelve percent attended other types of public institutions. Over fifty-five percent of the states' secondary school teachers come from non-public colleges and universities; while almost a third are produced by the state colleges, about eleven percent graduated from other public institutions. A contrast with other states is the small proportion of teachers produced in the state university: only four percent of elementary school teachers and about six percent of those teaching in high schools.

HOLDING POWER OF MASSACHUSETTS SCHOOLS

Ability to hold educational personnel once they have been employed needs to be viewed in two ways: in terms of what happens in individual school systems and with respect to the state as a whole. Some school systems serve as training laboratories for others. Their school staffs are always mobile. The more prestigious and better paying schools have a better chance of holding the teachers and administrators they employ. Even in these, however, there may be considerable moving about from school to school and position to position within the same school -- all of which may effect the quality of education.

Even in some of the better school systems turnover is high. Some systems follow policies of employment that encourage teacher mobility. They

prefer turnover to tenure. They deliberately employ teachers who expect to remain only a few years, such as the wives of students or teachers just out of college. The motivation, however, is not entirely to save money by paying lower salaries to less experienced teachers. The practice gains support, rather, as a counteractant to obsolescence. Administrators of such schools argue that the young inexperienced teachers are up to date in their knowledge of subjects and teaching techniques, that they are more stimulating to students, more inclined to try new ideas and to provide variety than teachers who have been in the system a long time. "I had rather have a young, bright, dynamic teacher just out of college for two or three years than to have a less able and ineffective person permanently," is the way one superintendent justified his policy of planned turnover.

In terms of ability to hold teachers within the state as a whole, Massachusetts seems to compete favorably. It tends to draw personnel from surrounding states, particularly from the New England region. It benefits from the preference of many educational workers of Massachusetts as a place to live. The numerous opportunities for graduate study available make it possible for teachers to pursue on-the-job study that leads to professional advancement. The losses that do occur are due more to the peculiar characteristics of mobility in the teaching profession. Here Massachusetts seems to approximate the national pattern. Stated in general terms it is: Out of every ten new teachers employed, six will have left teaching by the end of five years. Of the remaining four, two will have moved one or more times to different school systems. One of these four eventually will move out of the classroom into other types of educational work while another may drop out of teaching. This means that only two of the ten originally employed are likely to continue as classroom teachers for as long as ten years or so. Of

those who drop out, however, one or two may re-enter teaching for periods of time.

FUTURE REQUIREMENTS FOR EDUCATIONAL PERSONNEL

Various factors increase the numbers and quality of educational personnel needed for the future. These relate to correcting present understaffing of schools, expansion of educational services, enrollment increases to some extent and the continuing turnover of educational personnel.

Already the Massachusetts Department of Education is making long range projections of the staff requirements to comply with the recommendations of the Willis-Harrington Commission.¹ Working from the formula of forty teachers and ten non-classroom personnel per one thousand pupils in elementary schools, and sixty teachers and fifteen non-classroom personnel in secondary schools, the committee calls attention to the importance of maintaining flexibility to accomodate innovations in curriculum and staff utilization. Significant is the attention given to reduced teacher-pupil ratio for classes for handicapped students.

Staffing schools by the Willis-Harrington Commission formula, now adopted by the State Board of Education, will require increases that generally approximate the projections included in Table II. Assuming that ninety percent of the teaching force in public and non-public schools are certified or judged qualified, a conservative estimate, 52,520 of the state's 57,625 teachers are qualified. By the newly developed staffing formulas, however, the deficit of qualified teachers is 9,357, without providing for reduced pupil-teacher ratio for special classes. About 680 additional teachers would be needed to

¹ Advisory Committee on Pupil-Teacher Ratio, Staffing Massachusetts Schools, Massachusetts Department of Education, 1968, pp. 16.

staff properly classes of handicapped. This would bring the total of teachers actually needed in 1967-68 to achieve the State Board Formula to 62,557.

Data were not available for public and non-public schools with respect to non-classroom personnel presently employed. When such are included, according to the present formula for staffing, the total numbers of educational personnel needed in ten years, by 1977-78, are predicted to reach 87,910, with enrollment increases being estimated at about 1 percent a year. Because of the heavy losses of personnel, however, Massachusetts will need 13,978 new employees annually, not counting the numbers required to make up present deficits, if the new formulas are to be met. The estimates of educational personnel needed, although based on the best evidence and judgements available, should be viewed as tentative guidelines only. Changes in controlling factors such as birth rates, holding power of schools, staff utilization patterns can easily modify actual predictions from year to year.

Realistic Approaches to Obtaining Educational Personnel

Usual approaches to obtaining a sufficient supply of educational personnel are persistently unrealistic. The assumption seems to be that if salaries can be improved and class sizes reduced more young people will want to teach. Basing preparation requirements more on academic than education courses is thought by some to be an added inducement. Making teachers more secure by tenure and uniform automatic pay increases represents another approach. Added to these are appeals for greater general public respect for teaching and more diligent recruitment campaigns.

Efforts to achieve a sufficient supply and quality of educational personnel typically ignore the total manpower picture. For example, with high level talent in short supply in all fields, educational planners naively assume that twice the proportion of college graduates -- two out of four instead

TABLE II

EDUCATIONAL PERSONNEL NEEDED IN MASSACHUSETTS UNDER PRESENT STAFFING PATTERNS

Type	<u>Needed - 1967-68</u>	<u>Deficit by **</u>	<u>New Personnel Needed Annually ***</u>	<u>Total Number in ten years</u>
	<u>Certified or Judged Qualified*</u>			<u>Includes non-classroom personnel</u>
			(----- Classroom Personnel Only -----)	
Elementary Schools:				
Public School teachers	22,513	2,047	6,160	27,020
Public School non-classroom				6,200
Non-Public School teachers	5,715	760	1,375	7,285
Non-Public School non-classroom				1,925
Secondary Schools:				
Public School teachers	20,228	6,412	5,588	32,640
Public School non-classroom				6,725
Non-Public School Teachers	4,064	136	855	5,055
Non-Public School non-classroom				1,060
Totals for Mass.	52,520	9,357	13,978	87,910

TABLE II (CON'T)

- * Estimated 90% of those presently employed
- ** Staffing formula: Elementary Schools: 40 teachers and 10 non-classroom professionals per 1000 pupils
Secondary Schools: 60 teachers and 15 non-classroom professionals per 1000 pupils
- *** Estimated 20% needed annually to replace those retiring or leaving teaching positions in Massachusetts and 1% additional personnel to provide for enrollment increases.

of one as at present -- can be attracted to educational work. At the same time, they argue that teachers should be drawn from the upper twenty-five or thirty percent of college populations. Such reasoning would be fallacious, even if business and industry as well as all other professions and various governmental agencies were not competing for the same talent.

The notion that higher pay will attract more and better personnel also ignores competition from other fields. Business and industry, particularly, set pay scales by the competition faced. So, too, do other professions and even civil service. Skilled labor uses sliding formulas based on costs of living and relative pay patterns to keep wages abreast of escalations in the economy. The hierarchy of incomes for various types of work is difficult to alter. Teachers' salaries are one of the barometers that forecast changes in other fields. If they go up twenty or even fifty percent, so do the pay patterns for competitive positions in all other fields.

Supply and demand statistics for educational positions usually fail to include information about non-public schools. For a state such as Massachusetts, such a limitation may be particularly misleading. It does not show the total competition for educational talent. Nor does it give an accurate picture of the numbers and kinds of college graduates who elect to teach in elementary and secondary schools.

Another weakness in most efforts to relieve teacher shortages are unrealistic assessments of the appeal of conditions of employment. For many beginning teachers -- those who major in fields that are not highly marketable -- salaries appear to be reasonably good. They like the six-hour day, five-day week and the long vacation periods. Furthermore, most young people are not induced to enter teaching by assurances that the average class size has been decreased by a few pupils, such as from twenty-eight to twenty-four, however, teachers' organizations may prize such reductions as bargaining

goals. Nor do they think much, at this point in their lives, about maximum pay levels or rates of progress toward them. The able and ambitious who consider careers in education are usually not impressed by such promises of security as tenure, single pay scales or retirement protection.

The assumption that certain attitudes toward educational work can be altered significantly is sheer fantasy. No amount of effort, for example, will persuade young women -- who outnumber men by four to one among prospective teachers -- to place a career in teaching ahead of one in homemaking. Some, of course, ultimately will choose to follow both, if conditions permit and are sufficiently persuasive. Few, however, will look initially upon teaching as more than temporary employment for two or three years.

It is generally assumed that if prospective teachers were not required to take "so many education courses" to qualify for certificates, more able young people would choose to teach in elementary and secondary schools. This just could be the greatest fallacy of all, particularly in Massachusetts. In the first place, education requirements are not unduly high; many students, in fact, take more such courses than are required -- for either certification or college graduation. Teachers in service continue the pattern. Furthermore, when professional training is made relevant to classroom experience, as it is in some Master of Arts in Teaching programs, able students endorse it as vital preparation. In Massachusetts non-certified college graduates can teach in private schools. Such institutions do not report an over-supply of good applicants for their positions. The likelihood is that education already is attracting almost a maximum proportion of college graduates. One suspects that even if all certification and preparation requirements were abolished, the supply of able college graduates interested in teaching at these levels would not be increased substantially.

More realistic approaches to obtaining educational personnel suggest that

by present staffing patterns there never will be a sufficient supply of high ability professional teachers to staff all classrooms. No other profession has been able to obtain enough professional talent to perform all its services. Teaching, in fact, is the only field that has not substantially increased the number of clients per professional over the past thirty years. The need in education is to re-design the use of talents that will be available so that new sources of human and technological assistance may be fully utilized. With respect to professional career teachers, a reasonable goal is not more but better prepared personnel. High level professional teachers must serve greater numbers of pupils. Their work must be professional in nature with the other kinds of necessary chores with which teachers are typically overburdened carried by para-professional personnel. In short, the education professions should aim to develop true professionals who perform professional services for professional pay and prestige.

New Formulas for Staffing Schools

Progress toward developing new patterns for staffing schools is already under way in Massachusetts. The Department of Education urges experimentation to test new ways of staffing schools. Almost half of the public school superintendents report the use of para-professional personnel, including teacher aides, interns in training, instructional secretaries, lay readers and other kinds. Increased use is being made of the resources of educational technology.

Possible next steps to improve the staffing of schools include: (1) equalizing pupil-teacher staff ratios for elementary and secondary schools; (2) defining appropriate pupil-teacher ratios for special opportunity schools for handicapped children -- including the culturally and economically disadvantaged as well as children and youth with mental, emotional and physical limitations; and (3) projecting possible staffing models that make use of

different kinds and levels of professional and para-professional talents.

With reference to equalizing staffing ratios for elementary and secondary schools, traditional practices need to be examined. It has long been assumed, for example, that smallest pupil-teacher ratios should be maintained with the most mature students -- those in graduate schools. Next favored have been college undergraduates with high school students and those in elementary schools given larger pupil-teacher ratios in that order. Simple logic raises doubts about this pattern of increasing the amount of teacher time available as students develop greater capacity for independent study. One would think it would be the other way around. Further, providing lower pupil-teacher ratio for high schools as compared to elementary schools is difficult to justify in the face of research evidence that most educational failures stem from inadequate instructional assistance during the younger years. Quality education would seem to demand that elementary schools be provided staff resources equal to those in high schools. In terms of the Willis-Harrington formula, this would be sixty classroom and fifteen non-classroom personnel per one thousand pupils.

Even smaller pupil-teacher staffing ratios are required for special opportunity schools or classrooms. Included in such programs are children and youth with cultural and economic disadvantages as well as the ones with mental, emotional and physical disabilities. Ten percent of the student population in Massachusetts falls into the mentally retarded classification requiring special education. Another five percent or more have emotional and physical limitations. An additional fifteen percent require special help because of limitations in home and community backgrounds. Thus, about thirty percent of the student population falls into the category requiring small sized classes and specialized instruction. Such a ratio of handicapped to normal may be expected to extend increasingly through secondary

school years since these pupils need continuing help. Smaller classes will not be needed, however, for normal pupils whose handicap can be remedied by effective programs of instruction during elementary school years. Thus, the load of Special Opportunity pupils could be predicted to be cut in half for the secondary school, assuming the success of the high intensity staffing herein suggested.

Recommendations of the Advisory Committee on Pupil-Teacher Ratios range from ratios of 6:1 for deaf and emotionally disturbed children to 15:1 for mentally retarded and physically handicapped pupils. Experience with workable programs of education for culturally disadvantaged children and youth suggest that pupil-teacher ratios should be kept within similar ranges. A useful general overall guideline for staffing educational programs for handicapped pupils is a ratio of 10:1 for classroom instruction. Within such a formula appropriate modifications can be made for particular groups. In the context of the Willis-Harrington recommendations, the ratio suggested is 100 classroom and twenty auxiliary back-up non-classroom personnel per 1000 handicapped pupils.

Projecting staffing models as a guide for long-range and statewide staffing of educational programs will be required as a base for sound planning. To illustrate the kind of differentiated staffing involved the following formula is proposed. It takes as its base the Willis-Harrington formula for secondary school staffing, with elementary schools equalized to the same ratios. A separate high intensity staffing formula is suggested for handicapped pupils in Special Opportunity Schools. The levels of professional and paraprofessional staff members employed are those proposed in Chapter 2 under Recommendations for Certification. They approximate the numbers that realistically may be expected to be available at each level of professional performance in view of the competition for talent that prevails. Included among Educa-

tional Specialists may be high level classroom teachers and professionals from cognate fields such as sociology and psychology as well as supervisors, counselors and administrators. Professional Teachers or Educational Specialists will be responsible for professional planning and decisions, although advanced Associate Teachers may take some such responsibilities. Interns will rotate through the range of teaching responsibilities. Para-professional personnel will perform various non-professional tasks within the instructional team. Such a model can be only suggestive. Modifications in allocations of personnel or even the addition of other categories may be found more practical. Also, individual school systems will undoubtedly project patterns uniquely suited to their characteristics and preferences. To be avoided is the assumption that a model such as follows is intended to serve as a monolithic pattern.

Elementary and Secondary Schools:

For every 1000 pupils --	15 Educational Specialists
	15 Professional Teachers
	20 Associate Teachers
	25 Interns or Para-professionals
Total personnel	<u>75</u>

Special Opportunity Schools:

For every 1000 pupils --	20 Educational Specialists
	30 Professional Teachers
	30 Associate Teachers
	40 Interns or Para-professionals
Total Personnel	<u>120</u>

Educational Personnel Required Under Proposed Staffing Formula

A comparison of the numbers of different kinds of educational personnel

required under present and proposed staffing patterns, using 1,000 pupil units for each type of school, is shown in Table III. Illustrated is the reduction possible in professionals required to staff schools. For the six units illustrated, the number of professionals required is reduced from 240 to 180 even though pupil-teacher ratios for elementary and secondary schools have been equalized and a ratio of 10:1 provided for special opportunity classes. Of significance in this pattern of differentiated staffing, is the fact that most of the turnover will take place at the Associate Teacher and Para-professional levels.

No claim is made that the proposed staffing formula will be less expensive, initially or eventually. It represents a better and more realistic way to staff schools and should produce more learning for the money invested. A key advantage will be the retention of good teachers in the classroom, since pay scales can be related to levels of performance. Professional teachers and those who become Educational Specialists can be placed on salaries that are competitive with professionals in other fields with similar competence. Another advantage of the formula, costwise, is that it will provide both increases in numbers of personnel for educational services, better professional leadership for instructional services for less money than would be required under existing staffing patterns.

What the adoption of a staffing formula of the type suggested will mean in terms of educational personnel required for the future can be seen from the estimates in Table III. The numbers of Educational Specialists and Professional Teachers needed under the new formula is substantially under the requirements imposed by present staffing patterns, shown in Table II. Such reductions in numbers of professional teachers are realistic in terms of the talent available and the performance capabilities that can be developed.

TABLE III

SAMPLE COMPARISON OF EDUCATIONAL PERSONNEL REQUIRED UNDER PRESENT
AND PROPOSED STAFFING PATTERNS

Types	Number required to provide instruction for 1000 pupils in each category				PROPOSED			
	PRESENT		PROPOSED		PROPOSED		PROPOSED	
	<u>Elementary</u>	<u>Secondary</u>	<u>Special*</u>	<u>Total</u>	<u>Elementary</u>	<u>Secondary</u>	<u>Special</u>	<u>Total</u>
Educational Specialists	10	15	15	40)	15	15	20	50)
Professional Teachers))
))
) 240	15	15	30	60)
)				180)
Associate Teachers))
	40	60	100	200)	20	20	30	70)
Para-Professionals								
					25	25	40	90
	50	75	115	240	75	75	120	270

* Estimated from recommendations of Committee on Pupil-Teacher ratios.

Table IV illustrates the types and numbers of personnel that would be required under this kind of differentiated staffing at the end of the next ten year period. The 77,327 Associate, Professional and Specialized personnel needed, compares to an estimated 87,910 that the present formula is predicted to require. The additional 37,657 para-professional personnel would be expected to add substantially to the quality of instruction, particularly for handicapped students where the pupil-teacher ratio would be maintained at the level of 10:1. Here, again, estimates can be only suggestive. Changes in staffing patterns may result from goals pursued, availability of talent, preferences of school systems and the dependence placed on technological resources.

TABLE IV

EDUCATIONAL PERSONNEL REQUIRED FOR PUBLIC AND NON-PUBLIC SCHOOLS UNDER DIFFERENTIATED STAFFING

Types of Personnel	All Elementary Schools		Special Opportunity Schools		All Secondary Schools		Totals in Ten Years *
	Total Needed 1967-68	Total Needed in Ten Years *	Total Needed 1967-68	Total Needed in Ten Years *	Total Needed 1967-68	Total Needed in Ten Years *	
Educational Specialists	8,040	8,120	7,080	7,150	6,435	6,499	21,769
Professional Teachers	8,040	8,120	10,620	10,726	6,435	6,499	25,345
Associate Teachers	10,720	10,827	10,620	10,726	8,580	8,660	30,213
Interns & Para-Professionals	12,400	12,524	14,160	14,301	10,725	10,832	37,657
Totals	39,200	39,591	42,480	42,903	32,175	32,490	114,984

* Estimated increase to be about 1% per year.

RECOMMENDATIONS AND SUGGESTIONS

As pointed out, the foregoing sample model for redesigning the over-all pattern for staffing educational programs must be viewed as suggestive only. Experience and experimentation will be required to determine the specific patterns that work best. Additionally, individual school systems will prefer different kinds of differentiated use of educational personnel. What is most important is the basic idea that new formulas should be tried out. On this concept the following recommendations rest:

Recommendations

1. New staffing patterns for elementary and secondary schools should be developed that make full and appropriate use of various kinds of educational specialists, professional personnel, beginning or associate teachers, interns in training and para-professional workers. Professional teachers should be in charge of the diagnoses and prescriptions for instruction of all children. Much of the actual teaching should be done by other members of the instructional team under the direction of professional personnel. Full use should be made of educational technology
2. School personnel policies, such as employment qualifications, staffing patterns, salaries, promotion and tenure policies, should be adapted to new staffing patterns. A key objective should be to provide opportunities for appropriate professional contributions, advancement, competitive financial reward and professional prestige within the instructional team.
3. Long-range planning for educational personnel should:
 - a) be sensitive to the total manpower supply and use patterns in the state and nation;

- b) take into account needs of both public and non-public schools;
- c) be synchronized with the growing requirements of post-secondary institutions, including community colleges and adult education;
- d) keep preparing institutions and state credential committees aware of predicted and actual trends in supply and demand for differing kinds of educational personnel.

Suggestions

1. Responsibility for projecting the numbers of various kinds of personnel needed in education should be assumed by the State Board of Education. That agency might well provide leadership, also, to recruit the kinds of talent needed.
2. Assessment of the effectiveness of various patterns for the deployment of educational personnel should be made by school systems and the State Board of Education. Help should be provided by colleges and universities and the Federal Regional Research Laboratory.
3. Educational industries might be asked to assist with experiments to make full use of educational technology as an adjunct of staff utilization policies.
4. A key objective in all personnel planning should be to improve the competence of professional personnel, increase the number of clients served by each professional, and generally to raise the levels of professional service and rewards.
5. Members of the education professions and the various associations that work to improve professional conditions should be involved in all aspects of personnel planning.

Chapter 2

CERTIFICATION OF EDUCATIONAL PERSONNEL

The quality of teachers and other educational personnel depends on the standards maintained as well as the supply available. The two factors are related. In general, states that maintain the highest standards for professional practice attract the greatest numbers of talented persons seeking employment. This rule works also for individual school districts. Able educational personnel prefer to work in situations where standards are high.

State standards for certification, employment demands of individual school systems, graduation and endorsement for teaching requirements of colleges and universities as well as qualifications supported by professional associations -- all influence the preparation and in-service development of educational personnel. The tendency, however, is for state certification requirements to set the general pattern of quality. Whatever level of qualifications a state accepts for admission to practice may either strengthen or limit other influences. If state requirements are low, rigid, or if they emphasize quantitative rather than qualitative factors, colleges, school systems and professional groups are likely to follow the same types of patterns. An unfortunate consequence may be an over-emphasis on meeting requirements that have little to do with ability to perform required professional tasks. When such conditions prevail, as they do now in Massachusetts and many other states, failure and frustration of those involved result.

FAILURE OF PRESENT SYSTEM

Massachusetts was the last state to follow the national pattern of state certification. Not until 1951 was legislation enacted to establish such a plan. It went into effect in 1954 with a grandfather clause that permitted those already employed as teachers to continue their work without certifica-

tion. By 1967-68 about 92% of public elementary and secondary school personnel were certified or else came under the grandfather clause provision. Not all certified, however, were licensed for their teaching assignments. The state plan applies only to public elementary and secondary schools. Some non-public school systems, however, have followed the practice of employing certified teachers whenever possible. The failure of other non-public schools to make use of certification as a protection to students is due largely to a lack of confidence of such institutions in the kinds and quality of standards maintained as well as to a shortage of certified teachers. In some cases, private schools consider such practice contrary to their self-image of independence. Disregard for state certification has been exhibited at times, also, by some public school systems for similar reasons.

Plan for Certification

The plan adopted in Massachusetts follows the national trend of basing certification for teaching primarily on a candidate's transcript record of college courses and degrees. A type of "program approval" -- a practice now popular in 39 other states -- operates in the state colleges. As is true elsewhere, however, this arrangement tends to emphasize patterns of courses required for institutional endorsement for certification. Its effect is to hold the colleges to a state determined curriculum while transferring the checking of credits from the State Department of Education to the college campus.

The numbers of credits specified for certification under the transcript record plan in Massachusetts are modest in comparison with requirements in other states, as shown in Tables V and VI. No specified amounts of credit must be taken in the basic liberal arts by either elementary or secondary teachers. The baccalaureate degree is required of all, however, a practice

that is now standard in all except four other states. California and Washington require the completion of one year of graduate study for a standard certificate and the District of Columbia makes the same requirement for junior and senior high school teachers. Massachusetts law requires that an individual be a citizen of the United States to be eligible for a teaching certificate, a practice in 32 other states. Good health and sound moral character are also required. Fifty-one different classifications of certificates are issued by the State Bureau of Teacher Certification and Placement to designate preparation for different assignments. The initial certificate is a permanent one -- good for life. State certification is required for teachers in public kindergartens, elementary and secondary schools as well as junior colleges operated by local school committees.

Other kinds of educational personnel that must be certified by special certificates in Massachusetts include elementary, junior high and secondary school principals, superintendents of schools, general supervisors, special supervisors, guidance directors or supervisors, guidance counselors, school psychologists, school librarians, teachers of driver training, teachers of the deaf, teachers of speech and hearing handicapped and teachers of special schools and classes.

Principals must hold the master's degree plus ten and two-thirds semester hours of graduate credit for the standard certificate and a two-year graduate "Specialist Degree" for the professional certificate. Superintendents must have sixteen semester hours beyond the masters for the standard certificate and the Specialist Degree for the professional certificate. For both principals and superintendents the standard certificate must be converted into the professional within an eight year period.

TABLE V

RANGES OF CREDIT REQUIREMENTS FOR CERTIFICATION---
ELEMENTARY SCHOOL

	Liberal arts Courses *	Specialization in a subject field **	Professional Education--- not including student teaching	Credit re- quirement for student teaching
	Sem. hrs.	Sem. hrs.	Sem. hrs.	Sem. hrs.
High for Nation	100	36	30	8
Average for Nation	50	24	19	6
Low for Nation	---		5	2
Massachusetts	---	---	16	2
	---	---	---	---

* May include some courses taken for specialization

** Required in eight states

*** Not specified

TABLE VI

RANGES OF CREDIT REQUIREMENTS FOR CERTIFICATION--
SECONDARY EDUCATION

	Liberal arts Courses	Major Field (English)	Minor Field (English)*	Professional Education-- not including student teaching	Credit require ment for student teaching
	Sem. hrs.	Sem. hrs.	Sem. hrs.	Sem. hrs.	Sem. hrs.
High for Nation	100	48	36	24	8
Average for Nation	54	28	22	14	6
Low for Nation	--**	15	6	9	2
Massachusetts	--**	18	9	10	2
	---	---	---	---	---

-52-

* English used as typical example; requirements vary by subject field

** Not specified

Weaknesses in Present Certification Plan

The Massachusetts plan of certification by transcript records or program approval based on patterns of required courses has been proved to be inadequate both in this state and elsewhere. The weaknesses result from the approach followed rather than from deficiencies in its administration. Underlying the ineffectiveness of certification by prescribed course credits is the lack of comparability of courses and student attainments. Wide variations exist in content of courses and programs in different institutions. Standards range to extremes as well as do the abilities of students who are preparing for teaching. Furthermore, patterns required for subject majors may not be most relevant to the preparation that elementary and secondary school teachers should have. A prospective teacher may complete successfully the number of subject course hours prescribed and still not possess the kinds of knowledge that particular teaching assignments require. Similar differences are found in requirements for the professional sequence. Additionally, conditions and experiences provided in student teaching or internships do not approximate any common standard of quality. Some students in some institutions can satisfy the requirement only after the most carefully supervised, intensive and comprehensive demonstrations of ability to teach. Others in other colleges may qualify by working only two hours a week for a semester in a college science laboratory without ever having taught a high school class.

A positive relationship does exist, or at least it should, between the courses students study in college and the knowledge they possess. General requirements for blocks of credits in a field, however, do not guarantee that all will possess adequate amounts of the right kinds of knowledge to teach in particular situations. Nor do they assure that, given the proper

knowledge, effective teaching will result. Individual differences in college curriculums, professors and students are so great that common credit hour requirements cannot be expected to produce identical qualifications. One student who has majored in mathematics, for example, may be familiar with the concepts and content of the new mathematics; another may have little knowledge of such developments. Also, an individual may know subject matter well or be a good student of education without being able to teach. What is required is appropriate knowledge and in-depth scholarship in a subject field, an understanding of the principles and processes of learning and teaching, an acquaintance with the maturity levels, cultural and psychological differences in pupils and the ability to translate such knowledge into effective teaching performance. A better way of knowing whether given candidates for teaching have achieved acceptable performance levels is for experts to observe and judge their work in the classroom. Objective measurements of knowledge possessed can be useful indicators of scholarship but performance tests are required to assess teaching ability.

Massachusetts teachers, administrators, college professors, state department officials and representative laymen as well as consultants who helped with this study are in agreement that the present system of certification fails to guarantee that all given licensees will be capable to teach. Thus, the main purpose of certification -- protection of the public against incompetent professionals -- is not being achieved as intended. A reported undesirable influence of the present system is the negation of initiative on the part of college faculties to devise and test better ways to prepare teachers. With the prescription for certification already having been made, little incentive or indeed freedom to change exists for institutions. Those that do attempt to develop new programs often meet resistance from prospec-

tive teachers who are content to satisfy minimum requirements or fear that the new plans will not lead to certification.

Failure to guard against professional obsolescence, to differentiate professional personnel from apprentices who are employed for only a few years at a time or to distinguish levels of competence are other indictments that are made of certification. More than anything else, the certificate has come to mean a license to hold a job in a school system. As such the process becomes subject to all the political pressures that are associated with right to work philosophies. School systems that maintain their own certification plans do so, largely, to establish priorities for employment as one means of reducing political pressures for individual candidates.

The present system of certification unquestionably repels some able college students who recognize the ineffectiveness of patterns of course requirements. A number of non-public schools traditionally have employed such college graduates and found many of them promising teachers. Such institutions have used on-the-job training in effective ways to remedy the deficiencies in pre-service pedagogical preparations. Most of these students, to be sure, might have profited from a good program of supervised internship and related pedagogical study prior to employment. It must be recognized, however, that the emphasis in professional orientation, as far as certification requirements go (only two semester hours must be taken in student teaching), is on the academic study about education more than on first-hand experiences in teaching and relevant application of knowledge about learning and teaching. In this respect, it should be said, some preparing institutions have departed from the state requirements to place much greater emphasis on clinical practice.

Ironically, the present system of certification -- even in the state colleges where approved programs exist -- takes the decision about who should

be qualified to teach out of the hands of the people who are best able to judge either academic adequacy or professional performance. As Dr. Alvin P. Lierheimer, Director, Division of Teacher Education and Certification in New York State, pointed out to one of this Study's Advisory Conferences:

Today certification means course prescription by the state, completion of which is offered to the public as a guarantee against incompetence in the classroom. If that is really the purpose of certification, is the state the best agency to carry out the function? Certainly the state is pretty far removed from the individual teacher whose incompetence is being protected against and a Martian observer could well ask why the decision about competence is not made by someone who knows the teacher.²

In practice, decisions by state officials about the awarding of certificates have qualified some who were not adequately prepared or professionally capable to teach and denied certification to others who were. Some college graduates who would not be endorsed for teaching by college faculties or by competent professionals can obtain licenses because they have the required credits. On the other hand, some able prospective teachers and even successful, experienced teachers from other states and countries have been denied licensure because their transcripts did not comply with state prescriptions.

Another weakness of the present system is the lack of involvement of elementary and secondary school teachers, either individually or through their professional associations, in the formulation of standards for admission to professional practice. School administrators and supervisors report, too, that they do not feel closely identified with the system. Nor do members of local school committees who represent the public. Academic

²Alvin P. Lierheimer, "Let's Give Up the Ship," pp. 3-4, see Report Number II

professors in colleges and universities have taken little responsibility for defining training requirements in their subject fields or judging the overall impact of programs of preparation. Such isolation from decisions about certification, that is felt by key groups, exists despite the fact that the Bureau of Teacher Certification and Placement has maintained advisory committees that aim to tap the opinions of representative persons. The "advisory status" of such bodies may well account for the feelings of non-involvement. Another factor, no doubt, has been the legal status of present standards that make changes difficult and give rigidity to their administration.

Shortcomings of the present system of certification that operates in Massachusetts and most other states were described succinctly by Dr. Roy A. Edelfelt, Director, National Commission on Teacher Education and Professional Standards, National Education Association, at the final Advisory Conference held by the Study Committee.

1. The certification of teachers as we presently operate is incomplete and inadequate.
2. We have passed the area when certification based on college credits reported by paper credentials was adequate.
3. Able people are not attracted to or enticed to stay in teaching by present certification standards and procedures.
4. Certification should distinguish levels of competence, and responsibility for it should be fixed with several agencies.
5. The profession itself must become more directly responsible for the certification of teacher competence.³

³Roy A. Edelfelt, "Certification and Teacher Competence: Repair or Reform," Position Paper presented to Third Advisory Conference, See Vol. II of this Report.

PURPOSES OF CERTIFICATION

Developing a better system for the certification of teachers and other educational personnel, as this study recommends, requires a clear understanding of the purposes of certification. Needed, also, is a dissociation of certification standards and procedures from other processes such as institutional accrediting, college graduation requirements, standards of employing school systems, tenure programs and qualifications for membership in professional associations. If certification is to be effective, it needs clear-cut goals and procedures that function independently from other types of controls that aim also to ensure educational quality. Making processes interdependent, in fact, tends to weaken rather than strengthen the impact of each.

Certification is a term used to designate the attestation of an individual's qualifications. If one is certified by other qualified professionals, it means that he meets the standards maintained. A license is a legal permit to practice. It is issued by the State to an individual who has been certified as meeting professional standards and who meets other requirements for licensure that may be specified. Examples of the latter in Massachusetts, at present, are United States citizenship, good health and good moral character as well as the payment of license fees.

Protecting Against Incompetent Professionals

The state maintains a system of certification and licensure for educational personnel for the same reason it licenses professionals in other fields -- to protect the public against incompetent professionals. When functioning properly, a system of certification should admit to practice all who possess defined minimum competence and exclude all others.

By protecting the public against incompetent practitioners, a profession

enhances itself. It gains in public confidence and prestige. Furthermore, assurance is provided that qualified personnel will not be forced to compete with the incompetent. Certification should not be used, however, to arbitrarily limit the number of persons licensed in a field just to reduce competition for employment. Nor should it favor any particular types of individuals. It should be free from political pressures -- both from within and outside the profession.

Operating properly as a public protection, certification should serve as an attraction to able people to enter and remain in the educational professions. Such an assurance of professional competence should be voluntarily utilized by non-public as well as public elementary and secondary schools, since the idea of failing to provide assurance of qualified personnel should be shunned by all agencies that provide educational services to the public.

Distinguishing Levels of Professional Competence

Plans of certification can be strengthened, as Dr. James F. Baker pointed out to the Study Committee, by distinguishing levels of professional competence. A key objective is to attract and hold superior teachers in teaching and, hence, provide schools with higher levels of professional service. Differentiations in certification can be made, for example, between the intern in training, the beginning teacher who performs under supervision and the professional capable of independent service. Provision can be made, also, for those who have specialized in particular kinds of work, such as directing instructional teams, television teaching, supervision, counselling or administration.

With the increased use of professionals from cognate fields, provisions need to be made to include such personnel under appropriate license categories.

With para-professional personnel being employed, care needs to be exercised to make certain that professional decisions are made by properly licensed professionals. In distinguishing levels of professional competence in certification policies a goal should be to attract and retain better quality personnel rather than artificially to limit the supply or to create a monopoly for those already employed.

Assuring Against Professional Obsolescence

Full and continuing protection against professional incompetence requires periodic checks to make certain that certified personnel keep up-to-date in knowledge and effective in performance. Learning is a responsibility of every professional, as Dr. Dwight Allen, Dean of the School of Education, University of Massachusetts, and a member of the Study Committee, has pointed out. Only by keeping abreast of new knowledge in one's field of specialization as well as with improved professional insights and techniques can adequate performance be maintained.

To protect against professional obsolescence, the renewal of all certificates needs to be required at periodic intervals. Decisions to extend licenses to practice should be based upon judgements of adequate professional performance at the level of certification. Those re-entering professional work after periods of non-practice should meet the same test of up-to-date and adequate knowledge as well as acceptable performance skills as do others.

CERTIFICATION BASED ON PROFESSIONAL PERFORMANCE

An alternative to the present system of certification is one that is based on professional performance rather than record of college credits. The development of such a plan for Massachusetts has received strong support from representatives of various professional and lay groups and has the endorse-

ment of the Study Committee. It also has the backing of leading experts in the field of certification and leaders in the professional standards movement of the teaching profession, such as Dr. Alvin P. Lierheimer of New York State and Dr. Roy A. Edelfelt of the National Commission on Teacher Education and Professional Standards of the National Education Association, both of whom served as consultants to this Study.

Certain apprehensions do exist, of course, about the validity of judgments of professional performance. In the past the organized teaching profession has tended to oppose the idea of assessment of teaching competence on the grounds that reliable descriptions of good teaching could not be agreed upon. Hence, it has been argued, objective standards by which teacher effectiveness can be judged become impossible to formulate. Fears have existed also, that performance ratings would become the basis for merit pay plans, assignments and retention as well as tenure and promotions. Such uncertainties have led many to favor keeping a system of certification based on college credits as the lesser of two evils, even though the approach is ineffective.

A weakness in past efforts to judge professional performance has been attempts to apply general descriptions of teacher competence to all fields and levels of practice, including subjects or teaching areas now taught and any that might be added in the future. An assumption has prevailed that success in teaching such different subjects as art, English, history, German, mathematics, physics, physical education and home economics could be judged by the same criteria. In addition, it was assumed that to be valid the standards used should be equally applicable to teaching performance at the elementary level and with different kinds of student groups. A further "insurmountable obstacle" has been maintained by some by the demand for absolute objectivity in measuring performance.

Despite claims that teaching competence cannot be evaluated, it is a

fact the judgements of successful practice are common within the profession. They are made at various points in the careers of all educational personnel: during training, at the time of employment, for particular assignments, for retention in a position or school system, when tenure is awarded, for promotions and -- yes in some school systems -- as a basis for merit raises. No one claims that no differences in ability to teach exist although it is true that differentiation between close levels of ability are difficult to describe.

Research by Bob Burton Brown and Associates, conducted in California, Florida, Illinois, New York and Wisconsin, has indicated that it is possible to judge teacher performance.⁴ Of significance is the evidence that professional observer-judges can agree fairly closely on who is a good teacher or a poor one provided they hold basically similar philosophical and educational beliefs. Observations of teacher classroom behavior were found to be the most reliable predictor of evaluative ratings. Availability of criteria as a guide to performance judgements helps refine the process. More important, however, in terms of validity of overall judgements of successful teacher performance is the use of observer-judges who work from differing professional backgrounds. Thus, the judging team should include specialists in academic subjects as well as educationists, classroom teachers as well as supervisors and administrators. Such diversity tends to cancel out the individual biases that naturally exist.

Basing certification on professional performance differs substantially from other types and reasons for assessing teaching ability. In the first place, what is involved is only distinguishing between ability and inability to teach a particular subject adequately and at a specified level. Judging

⁴Bob Burton Brown, William Mendenhall, and Robert Beaver, "The Reliability of Observations of Teachers' Classroom Behavior," The Journal of Experimental Education, Vol. 36, No. 3, Spring, 1968, pp. 1-10.

minimum professional competence is relatively easy compared to distinguishing precise differences in professional abilities. It has the advantage, also, of a continuing period of validation --during student teaching and the internship, and throughout the initial years of teaching under supervision. Another strength is the possibility of multiple judgements by persons who know the candidate well, including academic professors, specialists in the methodology and practicing classroom teachers who supervise the clinical training.

Developing Knowledge and Performance Criteria

Judgements of professional adequacy may be aided by criteria that indicate the kinds and depths of knowledge considered most essential and the performance capabilities required for particular professional assignments. A danger exists, it should be pointed out, that such agreements may serve to perpetuate the status quo rather than to encourage the development of new kinds of teachers needed for schools now and in the future. Criteria guidelines, even when developed by academic scholars, education professors and classroom teachers may become as rigid and restrictive as course requirements.

Already national associations of teachers as well as state groups are developing criteria standards. The Massachusetts Association of Modern Foreign Language Teachers has adopted a plan developed nationally that emphasizes the testing of knowledge and ability to speak and write a language as well as teach it. Other groups may be expected to develop knowledge and performance criteria to serve as a basis for certification decisions.

A safeguard for the process of developing knowledge and performance criteria might be the involvement of laymen in the process. Their contribution might be to keep standards flexible and focused on the needs of various kinds of learners in elementary and secondary schools. Another might be to counteract the tendency of professionals to use certification as a means of

regulating the numbers admitted to practice.

The process of developing performance criteria as a guide for certification should be a continuous one in all fields. What is acceptable today likely will be obsolete a few years hence. A successful system of certification will provide for the continuous renewal and refinements of the criteria by which acceptable performance is judged. It will positively encourage change and flexibility, both with respect to established fields of teaching and new types of instructional services that educational programs require.

The practice of relating state standards to national efforts to establish performance standards needs to be watched carefully in all fields. National uniformity is not necessary nor perhaps desirable, no more than it will be at the state level. Differences in states, school systems, groups of pupils as well as the goals of preparing institutions are often more important to maintain than is conformity to a monolithic pattern at either state or national level.

Judges of Professional Performance

Competence for certification to teach should be judged by those most familiar with the candidates' abilities. For the prospective teacher in training such persons are most likely to be found within preparing colleges and universities and the school systems that provide supervised clinical practices. It is important that multiple judgements be obtained and that individual judges do not reach beyond their scope of competence. For example, academic scholars should be able to make good contributions to assessing the basic liberal arts and science background and the subject specialization of teachers; they may know little of the professional knowledge and skills that are essential. Contrary-wise, some professors of education may

not be the best judges of subject matter knowledge. Classroom teachers, those who provide day-to-day supervision of the candidate's clinical training have the best opportunities to judge actual performance. Yet their judgements may be based on restricted perceptions of teaching. These three types of professional judges -- academic scholars, specialists in education who are in charge of preparing teachers -- combine to form a team of experts capable of deciding fitness to teach. Their combined efforts will tend to counteract rigidities that might otherwise nullify the kind of resilient decisions that are needed.

Some institutions, particularly those with small enrollments of prospective teachers or those with limited personnel or experience in an area, may need help in assessing qualifications for certification. Such can be provided by state credentials committees representing the various fields. Cooperating school systems can help also. In some cases consortiums of schools and colleges can add strength beyond that of individual institutions.

For the decisions relative to the awarding of the professional certificate after the period of supervised development on the job, the renewal of licenses or the endorsement for higher levels of certification school systems should take the major responsibility. Committees of classroom teachers should share responsibilities with supervisors and administrators. Personnel from colleges and universities may contribute, too, if they have been involved in helping schools to develop personnel.

Some schools may need help from state credentials committees to make periodic judgements of teacher competence. They may also gain for assistance from other school systems and from professional bodies.

Need for Alternate Certification Procedures

Alternative procedures are needed to achieve effective certification

judgements in all fields and in all types of schools and institutions. Essential will be state credentials committees for the various types of positions for which certification is provided. Such bodies, working under a State Commission for Certification and Preparation of Educational Personnel -- to be described in Chapter IV -- should be responsible for developing standards and alternative procedures for their attainment.

In many cases, particularly with experienced and strong institutions, responsibility for judging qualification for certification will be delegated to preparing colleges and universities. Professional attestment will no doubt be the procedures most institutions employ to determine individual fitness to teach. Such a procedure has usefulness, also, for state credentials committees.

Decisions relative to initial certification at a given level of competence will likely be strengthened by the participation of individuals representing preparing institutions, school systems and the state credentials committees. Yet school systems may be approved to use the procedure of professional attestment to award certification to a candidate who otherwise has not qualified for an initial license, to gain licensing in a new field for which state criteria have not yet been developed and for the renewal of licenses.

Qualifying Out-of-State Personnel

Educational personnel who come from other states and countries should be awarded appropriate licenses on the basis of actions by state credentials committees. Help from colleges and universities as well as selected school systems may be used as needed, with assisting institutions reimbursed for such services.

Assessment of competence of out-of-state personnel should be based on

judgements of professional specialists in schools and institutions familiar with the candidates' preparation and performance. In some cases, examinations may need to be administered to ascertain subject matter knowledge.

Ordinarily, out-of-state teachers should be given initial certification as associate teachers until professional competence can be validated in a Massachusetts school system. Experienced teachers who come with a satisfactory attestment of three years or more of successful experience in another state may be qualified immediately for the professional certificate if confidence in performance can be established.

RECOMMENDATIONS AND SUGGESTIONS

Most discussions about improving certification center on whether four or five years of collegiate preparation should be required. Actually, practice suggests that when teaching is viewed as more than trade training the development of competent and independent professional teachers requires seven or eight years of study and supervised clinical experience. Producing high level educational specialists, for either teaching or non-classroom work, takes longer. Individual differences may either shorten or lengthen the time required. Performance capabilities will determine which.

With the growth in knowledge in all fields, it seems probable that most elementary and secondary school teachers will require the equivalent of five years of college study -- undergraduate and graduate -- as a base for teaching. Two or three years of supervised clinical practice and related pedagogical study, in my opinion, will come to be viewed as the normal time required to produce complete professional independence. At least one of these years of clinical practice, I suggest, should be devoted to an intensive internship that offers both close supervision and a wide variety of professional experiences; the remaining time needed to achieve professional independence

should be spent as associate teachers learning to teach in particular assignments under the guidance of professional teachers.

Considerable advantage is to be gained from overlapping advanced academic study with clinical training. Thus, the internship profits from being related to graduate programs and vice-versa. Pre-internship supervised experiences with children, schools, families and communities, such as training in micro-teaching, student teaching and various types of observation and participation, also help to give relevance to both academic and professional courses.

To correct the weaknesses that now prevail in certification and to make possible the kind of extended clinical practice needed by professional teachers, the following recommendations and suggestions are pertinent.

With Respect to Certification --

1. Certification should be based on knowledge -- of general background, subject specializations and pedagogy itself -- and professional performance, rather than transcript records as at present. The citizenship requirement should be discontinued or made more flexible since it denies schools the services of teachers from other countries. This and other Legislative requirements, e.g. "Proof of Good Health" and "Proof of Sound Moral Character" might better be made a part of employment conditions, rather than a condition of certification. Health examinations are needed more frequently than at time of renewal of licensure. Sound moral character can be made a prerequisite to initial and renewed certification, provided it is defined carefully. Here, again, employment decisions may be more timely and effective.

Notes: (a) In changing the approach to certification, presently em-

ployed personnel and those in preparation should be protected. They should be permitted, however, to seek certification -- initial or renewal -- under the plan herein proposed.

(b) The present permissive policy regarding certification of teachers in non-public elementary and secondary schools should be maintained. Here, again, voluntary participation should be encouraged. It is hoped, however, that the new approach will attract their voluntary participation.

2. Standards of professional performance should be developed by representative leaders in each field, including scholars in academic areas and teachers in elementary and secondary schools as well as pedagogical specialists and school officials. The objective should be to assure that all licensed to professional practice will have initial and continuing minimum acceptable performance ability at the level certified.
3. Procedures for certification should provide alternate ways to qualify that while assuring adequate performance by all will accommodate differences in individual and institutional programs of preparation. Examples suggested include approved institutional plans for judging knowledge of subject matter and ability to perform, certification by examination that includes performance tests -- administered either by preparing institutions or state credentials committees -- and professional attestment by qualified colleagues in schools and colleges.
4. The number of licenses issued for various kinds of professional practice, e.g. teaching, counseling or administration, should be kept to a minimum with specialized qualifications of educational personnel attested by academic, experience or performance records rather than

by license.

Four levels of licenses are suggested: Internship Licenses for those in training on a full-time basis; Associate Teacher Licenses for beginning teachers; Professional Licenses for those who demonstrate ability to handle professional assignments independent of supervision; and Educational Specialists Licenses for high-level teachers and those with particular kinds of specialization, such as counseling, supervision, administration of professionals in cognate fields, e.g. sociology, psychology, or systems analysis. No license should be required for para-professional workers other than those that may otherwise be the practice in a trade field.

5. Provisions should be made for periodic renewals of licenses without reference to tenure, based on demonstrated maintenance of scholarship and professional competence. Suggested renewal points are: Internship Licenses -- annually; Associate Teacher Licenses -- every three years; Professional and Educational Specialists Licenses -- every seven years.

Suggestions --

1. Criteria for judging professional performance will need to take into account the trends toward specialization in teaching and other educational work -- at both elementary and secondary school levels. A decision will have to be made concerning whether elementary school teachers should be expected to specialize in one or more academic fields. Patterns of staff deployment in schools will help answer this question. Another consideration is the advantage to the individual that comes from qualification for graduate study in a subject field. At the secondary school level, a concern will be whether candidates

should develop teaching concentrations that pyramid academic preparation in relationship to anticipated teaching assignments. Such planning contrasts to the traditional major and minor patterns that may be more relevant for future graduate study than for teaching secondary school subjects. Differences in institutional programs and the needs of particular teaching situations emphasize the need to maintain flexibility.

2. Judgements of professional performance for certification purposes should be made by qualified professionals representing various backgrounds such as classroom teachers, scholars in academic fields, supervisors and administrators as well as specialists in education.
3. Preparing institutions should be encouraged to work with cooperating school systems in which clinical training is provided to develop alternative ways to judge initial competence for certification.
4. School systems should take major responsibility to develop ways to attest continuing qualification for renewal of licenses or the certification of candidates for higher licenses. The sabbatical year, already in use in some school systems, offers an ideal way for professional teachers to keep abreast of new knowledge and professional techniques.
5. Teachers coming from outside Massachusetts might be awarded Associate Teacher Licenses for initial assignments and assessment of performance capabilities. In cases where high-level personnel are involved, however, decisions to award Professional or Specialists Licenses properly could be based on the candidates' records of experience or respected professional endorsements.
6. Teachers returning to service after periods of non-practice -- where licenses have expired -- could be issued Associate Teacher Licenses

until proficiency for higher licensure can be established.

7. Failure to maintain the level of performance for licensure could result in non-renewal, thus disqualification. In some instances, however, when the failure is inability to perform at an advanced professional level, such as Professional or Specialists, it may be decided to reduce the level of license to that of performance capabilities. Thus, a professional teacher who fails to maintain competence to perform independently might be licensed as an Associate Teacher and permitted to work under supervision.

Chapter 3

THE REFORM OF TEACHER EDUCATION

This study was predicated on the assumption that it is futile to expect that changes in certification will automatically produce needed reforms in the preparation of teachers. Documentation of institutional apathy, or addiction to the status quo, whichever, was offered by Dr. Alvin P. Lierheimer, consultant to the project, in describing one experiment in New York State to free institutions to pioneer new ways to prepare teachers.

Even when colleges are reminded of their freedom to experiment with new curriculums for teachers, they appear reluctant to do so. Colleges frequently talk rebelliously about the choking effects of state requirements but few of them ever propose and justify significant departures.⁵

Basing certification on demonstrated performance rather than accumulated college credits, as this study recommends, will release colleges and universities from state prescriptions for the preparation of educational personnel. Such action, in and of itself, experience tells us, will not automatically bring the reforms needed in teacher education. It can only free institutional faculties to plan together, and with elementary and secondary schools as well as the other education agencies, ways to develop the various kinds of professional abilities needed.

With the new plan of certification will come greater responsibilities as well as more freedom for both schools and colleges. No longer will they be able to ask, "What does the state require?" Instead, all involved in the preparation and use of educational personnel will be compelled to answer such questions as: How can learning be made relevant for different kinds of students -- those in the inner-city, the rural areas, as well as the suburbs?

5

Alvin P. Lierheimer, "Give Up the Ship," see Vol. II of this study.

What do educational personnel need to know or be able to do to work effectively with particular school groups? Or, as Dr. David Purpel posed to the Second Advisory Conference in his position paper on Student Teaching, how can programs of preparation prepare for roles that ought to be assumed rather than for what is?⁶ How may instructional tasks be differentiated -- and para-professional workers and educational technology be utilized -- to extend the impact of and provide opportunities for higher professional service as well as advancement for able classroom teachers? What needs to be done to keep the educational system up to date and self-renewing? What academic and clinical resources are essential and how can they be used most effectively to produce the kinds of teachers and other educational personnel that schools require? Some institutions will need to ask, too, as did Dr. Jerrold Zacharis at the Second Advisory Conference, whether academic professors are contributing to policies relative to the preparation of educational personnel?

INSTITUTIONS PREPARING EDUCATIONAL PERSONNEL

The preparation of educational personnel might be called a major industry in Massachusetts. It is a prior responsibility of most colleges and universities, since they produce more professionals for work in education than they do for any other fields. Programs of preparation offered attract students from all over the nation and other parts of the world, while graduates are employed outside as well as within the state.

In terms of present status, fifty-one public and non-public four-year colleges and universities provide more or less comprehensive programs to pre-

⁶See Volume II of this Study, David Purpel, "Student Teaching as an Agent of Counter Revolution," Position Paper presented to the Second Advisory Conference.

pare various kinds of educational personnel. Ten other specialized institutions also help to prepare particular kinds of workers for the field of education. This year these institutions will graduate about 7,600 teachers, 3,100 for elementary schools and 4,500 for junior and senior high schools.

In addition to providing pre-service preparation for teaching, twenty-six colleges and universities offer graduate programs to prepare a variety of educational specialists, such as department heads, librarians, specialists, teachers in subject fields, teacher trainers, teachers of the handicapped, supervisors, counselors, researchers, data processors and administrators. They also provide extension, evening and summer session courses to help experienced teachers keep up to date.

Diverse Resources

The institutions engaged in the preparation of personnel for education in Massachusetts represent a wide diversity of academic and professional resources. In size of institution, the range is from 150 total students to 31,737. With respect to prospective teachers some colleges enroll only twelve a year while one state college had in 1967-68, as many as 3,354. Boston University, a private institution that makes substantial contribution to the supply of teachers and other educational personnel for the state enrolled this year 2,018 prospective teachers and 2,175 graduate students. Massachusetts Institute of Technology prepares no one for educational work, yet members of its faculty have given national leadership to research to improve education, particularly in the area of new curriculums for science and mathematics.

With respect to programs offered, wide differences are found also. The relative amounts of emphasis placed on general education, subject specialization and professional education courses are shown in Table VII. In terms of

averages, the distribution approximates the national pattern. Massachusetts institutions, typically, require elementary teachers to take twenty-five percent of their work in professional education courses; the average requirement for the nation is twenty-one percent. The amount of professional education courses required for prospective high school teachers in Massachusetts is the same as the national pattern. It will be noted, however, that the average amounts of education course credits required -- about 30 semester hours for elementary and 20 for secondary school teachers -- exceeds substantially present state certification requirements -- 18 and 12 semester hours, respectively. This pattern reflects, no doubt, a general feeling that present state specifications are too low. Fifteen institutions that require prospective elementary school teachers to major in a subject field, typically ask that twenty-eight semester hours be assigned to this category. The average semester hours required in major subject fields for high school teachers ranges from fifteen, in agriculture, to forty-seven in music. The more typical average requirement for basic subject fields is from thirty-one to thirty-five semester hours.

Ranges of differences tend to relate to types and purposes of institutions represented. In some colleges, the preparation of teachers is little more than an incidental concern with courses in education being made available on an elective basis to meet certification requirements. At the other extreme are found institutions, such as the state colleges, that make teacher education their central concern. Types of programs range from four-year undergraduate programs with professional courses offered throughout to Master of Arts in Teaching programs, such as the one pioneered by Harvard University, that are open only to graduate students and involve a year or two of study and internship training. Smaller institutions may offer single type programs while the larger may provide optional patterns of preparation,

TABLE VII

DISTRIBUTION OF EMPHASIS IN UNDERGRADUATE TEACHER
EDUCATION PROGRAMS

Types of Programs	Average Percentage of Emphasis		
	General Education or Liberal Arts and Science courses	Specialization in a Teaching Field	Professional Education Courses
For Elementary School Teachers	59%	22% *	25%
For Secondary School Teachers	55%	33% **	17%

* Fifteen institutions require elementary teachers to complete a major in an academic subject field.

** Typically, prospective secondary school teachers prepare to teach only one subject field.

Note: Percentages do not equal 100 because differing patterns of distribution are involved.

often in the same field. Some institutions are beginning to offer special programs to prepare for such assignments as teaching in inner-city schools, but most tend to provide only general preparation without reference to particular kinds of assignments. Plans for student teaching differ from two hours of work a week, for one semester, in a college science laboratory with no chance to teach a high school class to full-time teaching assignments of a semester or more in elementary or secondary schools. Commendable, however, is the more typical pattern of full-time daily teaching for ten weeks duration. Interns typically teach full time for a year.

Not only do programs of preparation for teaching differ with respect to type, length, emphasis and offerings, they vary as well in terms of the students admitted. Some institutions select only outstanding college graduates for admission to Master of Arts in Teaching programs; others permit almost any undergraduate who can gain admission to the institution to prepare for teaching. Standards for graduation are equally diverse, with respect to courses taken, as well as levels of achievement.

Diversity is found in type of organization and policy-making procedures for teacher education. Twenty-five institutions have departments of education within liberal arts colleges; fifteen have professional schools of education. Eighteen provided for some form of interdisciplinary involvement of faculty members in the control agencies for teacher education. The mechanism found in eleven of these is an all-institution Council on Teacher Education in which academic professors are in the majority. In the seven others, the representation is about equal between professors of education and academic professors. In nineteen institutions, control is lodged in a faculty of education in which professors of education are in the majority. Others reported various other types of arrangements. Significant is the fact that in twenty-one institutions professors of education advise students preparing to teach

in high schools. In nineteen, such advisement is done by academic professors, while in sixteen others professors affiliated with both academic and education departments are the advisors. Academic professors advise students preparing for elementary teaching in only eleven institutions.

As would be expected, differences were reported in interest and ability of faculty members with respect to the preparation of teachers. Some institutions have academic professors who give a high priority to teacher education, as evidenced by the number who attended the three Advisory Conferences. Also, Massachusetts colleges and universities, very likely, have their share of the outstanding professors of education in the country. But the distributions of faculty talents vary. A few institutions are attempting to prepare teachers without either able professors of academic fields or education who are interested or willing to provide effective leadership.

All institutions reported that they try to orient prospective teachers to world affairs, a new emphasis in teacher education programs. They do so, mostly, in liberal arts courses, but about a fourth make this kind of emphasis a responsibility of the professional sequence as well. All are giving some emphasis to new curriculums, but none reported a comprehensive treatment in all subject fields. In no field do more than half the institutions provide prospective teachers a chance to study new curriculum concepts and content. Mathematics is the subject in which new curriculum treatment is most often found, in twenty-one institutions; reading is next, in eighteen; biology is given the new emphasis in fifteen; physics in thirteen; elementary science in eleven; social studies in ten; chemistry and English, in seven each. In sixteen institutions one of the foreign languages was reported to be a new curriculum field.

Sixteen institutions reported that prospective teachers are being prepared to deal with the psychological and sociological problems of culturally

disadvantaged children in student teaching and internship assignments.

Twenty-three provide such emphasis in professional education courses; seventeen in liberal arts courses; and five in major field requirements.

Problems Confronted

Massachusetts colleges and universities reported a wide variety of problems in the area of teacher education that extend well beyond the influence of certification requirements. Some of the difficulties in this area are caused by the nature of particular institutions. Others have common causes and characteristics.

Inadequate financial support is a shared plight of most programs of teacher education in colleges and universities. Some institutions actually spend less per student in preparation to teach than good high schools allocate to each of their pupils. Universities devote far less financial resources to prepare personnel for work in the field of education than they do to develop professionals for other fields. This generalization holds true even at the doctoral level where highest level specialists are prepared. State colleges, particularly, which are the major producers of teachers for Massachusetts, are still undersupported, despite budgetary increases provided in recent years.

All teacher preparing institutions reported difficulty in providing proper conditions for supervised practice in teaching. Nine have campus laboratory schools but some of these are too small to carry the loads. Six institutions maintain formal contracts with school systems to provide clinical stations. All other colleges or universities must struggle along with improvised arrangements with school systems, negotiated on a year to year basis. To obtain training stations, institutions compete with each other. In larger cities, ten to thirty colleges and universities may be involved.

About twenty percent pay school systems to help with clinical training, the rest do not. Six give other prerequisites, such as "fee credits" that give teachers or administrators reductions in tuition when they enroll for in-service or graduate courses in the colleges. Whatever the arrangement for cooperation, at best the conditions for clinical training are make-shift and inadequate.

A major deficiency in most arrangements for clinical practice is that classroom teachers to whom trainees are assigned are neither prepared to supervise student teachers nor do they have the time to do so. To overcome such deficiencies, college faculty members periodically visit schools to provide supervision. Such professors, however, may be totally unfamiliar with the programs in the schools, years removed from their own experience in classrooms and only superficially familiar with the trainee's problems and potentialities. Furthermore, instruction in methods courses, which are usually taught by college professors, may be in conflict with policies and procedures of the school system. The entire system produces frustrations for cooperating school systems as well as for college officials and prospective teachers.

Achieving internal and external cooperation is another problem confronted by those responsible for programs of teacher education. Within institutional faculties it is difficult to achieve active involvement of all professors -- liberal arts as well as education -- in the planning and carrying out of programs for educational personnel. Long accustomed to controlling teacher education, professors of education in some institutions (in over half in Massachusetts) make decisions themselves without the help of professors in subject fields. Busy with other interests and long excluded from policymaking in teacher education, many academic professors tend to give a low priority to responsibilities in this area. A tendency of some institutions

is to plan programs without consultation with leaders in elementary and secondary schools. Such lack of joint planning results in piece-meal programs that produce teachers who are often poorly prepared in the basic liberal arts and science fields -- particularly in the behavioral sciences -- less than competent scholars in their fields of specialization and poor risks in the classroom.

Absence of standards designed to fit particular fields or types of teaching assignments is another type of problem in the field of teacher education. The prevailing philosophy across the nation seems to be that preparation for all kinds of work in education should be pretty much alike -- that teachers like bricklayers are tradesmen who are interchangeable for all kinds of jobs. College and university faculties, as Dr. Robert Markarian of Springfield College, pointed out at the Massachusetts Governor's Conference on Education, are typically at a loss to describe the kinds of teachers they seek to prepare; thus, they are unable to define discretely the kinds of preparation needed. Similarly, some faculty groups seem unconcerned about the abilities of persons admitted to programs of preparation. In only about one-third of the colleges and universities in Massachusetts are prospective teachers considered better than average, intellectually and academically, compared to the total college population of the nation. In only seven institutions do they come exclusively from the upper half of the student body. It appears that in most institutions in Massachusetts, as is true for the nation as a whole, any individual who can gain admission to college is considered entitled to prepare for teaching. Candidates' rights to seek jobs as teachers seem to take precedence over those of pupils to be instructed.

Colleges and universities that prepare educational personnel are plagued with itinerant students who shop from one institution to another for the credits required. For such, it is impossible to plan balanced programs, for

faculty to come to know strengths and weaknesses, or to provide effective counsel. At the graduate level, particularly, this problem has reached epidemic proportions. Experienced teachers collect credits -- frequently in education courses, almost exclusively -- as tourists do national park stickers. Education extension and summer session courses are filled with elementary and secondary school teachers whose under-graduate preparations do not qualify them for graduate work in an academic field. Many are paid to earn the credits by their employing school systems that use credit accumulations as one basis for salary increments. Others seek to qualify for supervisory, counseling or administrative positions. Numbers enrolled for the latter objectives far exceed opportunities open. In many cases, however, the quality falls short of the kinds of personnel needed.

Staffing problems confront schools and colleges in the initial and in-service education of educational personnel. Deficiencies in numbers as well as types and quality of specialization were reported. Specialists in education in colleges and universities are often unfamiliar with innovations in elementary and secondary schools such as team teaching, programmed learning and the use of other kinds of educational technology. Despite the fact that they hold doctors degrees, they may be poorly prepared and little interested in research approaches to improve education. Thus, insecure and defensive they fall back on old dogmas and stereotyped answers to educational problems. Colleges and universities, as do elementary and secondary schools, confront turnovers of personnel that reduce stability in faculty groups.

COMPREHENSIVE REFORM REQUIRED

Criticisms of teacher education usually center on the control of programs by specialists in education, the imbalance in overall under-graduate programs on pedagogical courses, theoretical and didactic approaches to learn-

ing how to teach with insufficient first-hand experience, and poor conditions for clinical training of prospective teachers. Other indictments point to the continued, almost exclusive emphasis on pedagogical courses in graduate and in-service programs for teachers and other educational personnel.

Such charges may be verified or disproven by practices in Massachusetts colleges and universities, as well as others across the nation, depending on given situations, the time when evidence was gathered, which courses are offered by Education Departments, and hence, labeled "Education," whether stated requirements or actual student records are considered and the amount of education credits one accepts as sufficient. A study of transcripts of a random sample of elementary and secondary school teachers certified in Massachusetts over the past five years, for example, showed that elementary teachers had accumulated, on the average, thirty-four semester hours of credits in education courses by the time they applied for certification in this state. This average can be compared with the number Massachusetts requires for a license, (eighteen), and the national average requirement, which is twenty-five, including credits for student teaching. Secondary and special field teachers presented, on the average, twenty-seven semester hours of education credits. This compares with the state requirement of twelve semester hours and the national average of twenty semester hours, again with credits for student teaching included. Undoubtedly some of the education credits that candidates for certification had accumulated were added through graduate programs which might suggest a tendency to pyramid course credits in the field of education. Average credits in major fields presented by Massachusetts candidates for licenses, however, were above the average for the nation, as shown in Table VI, Chapter 2,--thirty-three as compared to twenty-eight.

Until recently, departments and schools of education across the nation

strongly defended the prerogative of education professors to make policy for teacher education. In many institutions the so-called all-university approach that provides for the interdisciplinary involvement in policy making of all professors who help to prepare teachers is only a treaty on paper between liberal arts and education professors -- more front than reality. A recent study of the question of control of teacher education revealed that nationwide all but a few die-hard deans and professors of education now favor sharing control with their colleagues in liberal arts. Less than eight percent, however, were judged willing to permit the balance of power to move out of their hands as it should if representation is made equal to teaching contributions in teacher education programs.⁷ Some teacher preparing institutions in Massachusetts report that a high degree of interdisciplinary control of policies for teacher education exists. In about eighty percent, however, the education professors have yet to give responsibility to academic colleagues commensurate to the work they do to educate teachers.

Without question, graduate programs for teachers and other personnel in educational work tend to be predominantly pedagogical in content, despite the need for up-dating knowledge in the academic fields and the resources available in various vital cognate fields that could be drawn upon. A healthy change in direction in in-service programs has been the National Science Foundation sponsored institutes that provide teachers a chance to up-date knowledge in content fields. Some school systems, as has been charged, still tend to reward with salary increases the accumulation of college course credits regardless of whether the choice of studies is related to professional assignments or whether improvements in performance result.

What is missing from the popularized criticisms of teacher education is

⁷Lindley J. Stiles and Fred D. Carver, "Who Makes Policy for Teacher Education?" Teachers College Record, Dec. 1967, pp. 205-6.

any expressed awareness of weaknesses in arts and science foundations or the fields of specialization. Yet many high school teachers are said to know too little about their major fields to teach them, while elementary teachers are criticized for not having specialized in any field. Both types of teachers are accused of knowing too little about life, at home and abroad, to serve as good models of educated persons. These criticisms point to failures in general education programs and subject matter specializations, the contributions of academic scholars, in fact, rather than to the professional sequence taught by professors of education. Evidence gathered about Massachusetts teachers supports such charges. It is unrealistic to attribute such deficiencies in basic general education and specialized scholarship in subject fields to the fact that prospective teachers must devote twelve or eighteen semester hours of course time to the study of education, as has been the requirement in Massachusetts. A more logical, but less popular, conclusion is that poor use is being made of the time available for the study of basic and specialized courses in the content subject fields. Studies of transcripts attest that such is the case. Poor choices of elective courses is one type of deficiency. Lack of availability of appropriate courses is another. Poorly organized and taught content courses, no doubt, adds to the failure to achieve goals of programs of liberal arts and sciences and major fields.

The reform needed in teacher education is a comprehensive one. Programs in the arts and sciences and subject majors as well as in the pedagogical area need to be completely redesigned, in many cases. Prospective teachers need a foundation of basic studies that provides an understanding of the life and problems of the times -- the human education of teachers -- as well as a base for cultural and scholarly development. Specialized scholarship should develop in-depth acquaintance with a subject field in a context of related

and supporting disciplines, including its structural characteristics, major concepts and intellectual processes as well as the different ways it may be organized for learning in schools. The professional preparation of teachers needs to be action oriented, moving from vital firsthand to relevant vicarious experiences -- the opposite of traditional approaches. School systems, perhaps, must take greater responsibility for the practical orientation of educational personnel to specific assignments, after employment, much as business and industry do for personnel in their fields.

The best planned programs of preparation for teaching and other types of educational work will meet with failure if the talent is poor. Educational personnel needs to be drawn from the top levels of intellectual abilities, since no program of preparation can compensate for deficits in mental capacity. Other qualities in addition to knowledge and ability to teach that prospective teachers need to possess or develop include: interest in working with people, particularly students; a dedication to professional service; sound mental and physical health; as well as acceptable moral behavior.

THE PRIORITY OF CLINICAL PRACTICE

Suggesting specific improvements generally needed in teacher education in Massachusetts has limitations in the face of the differences that prevail. Some institutions are strong where others are weak. An exception is the common problem of providing suitable resources for clinical practice. Practically all institutions, public and non-public, indicated a need for state assistance to improve conditions essential for ideal programs of student teaching and internships.

Making the improvement of clinical practice a priority, perhaps, offers the greatest promise of maximum gains in quality of teachers produced. Al-

ready, this phase of programs of preparation, e.g. student teaching or the internship, is rated most popular of all collegiate courses -- academic or professional -- by candidates for teaching, despite deficiencies that may exist. An inherent value is any opportunity to learn from first hand experience. Given the chance to deal with the reality of pupils in classrooms, prospective teachers find greater relevance for theories and knowledge about teaching and education. In addition, general collegiate preparation as well as specialized knowledge of a subject field take on added meaning.

The quality of supervised clinical practice makes significant differences in the levels of professional performance candidates for teaching achieve. Of greatest significance, perhaps, is the supervision provided by the clinical supervisor in the classroom. Such individuals need not only to be master teachers, they must know how to guide the development of neophyte teachers. Time must be available to provide the close tutorial help that must be given on a day to day basis. In addition, supervising teachers must have the kind of commitments that make teacher development a first priority. Other factors that relate to the quality of clinical practice include the kinds of pupils taught, the time devoted by trainees, both daily and overall, and the integration of study about education with actual experience.

Colleges and universities cannot provide suitable clinical practice for all prospective teachers without help of a fundamental nature from elementary and secondary schools. Earlier attempts to do so made use of campus laboratory schools. Despite certain advantages such resources offered, ultimately they proved to be inadequate. A major weakness has been the kind of pupil population enrolled. They do not bring the prospective teacher into contact with a normal distribution of pupils -- in terms of individual abilities of cultural backgrounds. The arrangements for teaching in comparison with the

kinds of schools in which graduates will be employed may be unreal with respect to class size, instructional resources available and pupil motivations. Another problem has been the fact that as institutional enrollments of prospective teachers increased, laboratory schools became too small to accommodate the loads of trainees. A strength of the laboratory school, nevertheless, has been the quality of supervision provided. Staff members have made teacher education a first priority, generally have been prepared and competent to help teach teachers and usually have had time to do so. Another plus for the campus laboratory school was the close correlation between the methods prospective teachers studied and those practiced in the schools. An overall contribution was the idea that learning to teach required extensive practice under supervision.

As campus laboratory schools proved too small to serve all prospective teachers, and in the face of criticism that they provided unreal conditions, colleges and universities increasingly turned to public and non-public schools for opportunities for clinical practice for their candidates for teaching. In moving clinical practice out of the laboratory school, the advantages of variety of student populations and typical school conditions were obtained. Disadvantages were found in the ranges of preparations and commitments of the classroom teachers who cooperated in providing day-to-day supervision of student teachers and interns. Often trainees had to be assigned to anyone who would accept them, rather than to teachers selected for either their abilities as teachers or as supervisors of those learning to teach. Additionally, most teachers who agreed to permit prospective teachers to practice in their classrooms did not have the time to really teach them to teach. As a consequence of such factors and others, the kinds of supervised practice provided came to approximate wide ranges in quality. Some student teachers, for example, spend almost all their time observing their supervisors teach with

a minimum opportunity to practice. In other situations, trainees teach almost full time with little supervision. Another disadvantage has been the lack of correlation between pedagogical instruction on campus and practices in schools where clinical experiences are provided.

The need of teacher education programs in Massachusetts now is for elementary and secondary schools to develop the kinds of resources for clinical practice that the better campus laboratory schools have maintained. To achieve such a goal will require commitments by school systems to serve as training centers, as some already have made. Classroom teachers who serve as clinical supervisors must be carefully selected, professionally prepared to teach teachers and provided time in which to perform such duties. School systems that elect to help prepare teachers must take responsibility for the quality of clinical practice. Colleges and universities might well concentrate on helping schools to develop high-level clinical supervisors rather than dissipating staff resources by sending professors into classrooms to supervise as has been done in the past. The State Board of Education needs to help with financial support and assistance in placing trainees in assignments. In short, the need is for a three-way partnership between the institutions of higher learning, school systems and the State Board of Education.

As Massachusetts schools move to provide improved conditions for clinical practice certain models of supervisor-trainee relationships may be useful guides. First of all, experience has demonstrated that two student teachers assigned to a class group learn more individually than when one works alone. The reason is that they teach each other through comparisons of ideas. Secondly, the time of competent clinical supervisors is better employed if each works with several trainees -- perhaps four or six -- during a semester. Such arrangements permit economies through group instruction as well as a commitment of portions of the supervising teacher's time to teacher

training. With six trainees assigned, for example, the supervisor might teach elementary or secondary pupils only two-thirds of the time. The other third would be devoted to supervision. As a third suggestion, team teaching arrangements that include interns as full members of instructional teams under the leadership of the clinical supervisor have proved to be good plans for teacher development. At the elementary school level, one clinical supervisor and two interns may teach two classroom groups, e.g. fifty to sixty pupils. In secondary schools, such a team might carry the teaching loads of two English or mathematics teachers. Larger teams are possible, too, that include both additional trainees, professional personnel, para-professional personnel and deal with larger numbers of pupils.

As school systems take greater responsibility for clinical practice, colleges and universities probably will concentrate more on developing personnel competent to serve as clinical supervisors. They will need, also, to provide consultation to schools and clinical supervisors as a continuing type of service. Once relieved of the task of close supervision of trainees, personnel in higher education can give more time to leadership in research to improve pupil learning and teacher development. A key need is to know more about the learning-teaching processes. An example of this type of pioneering research is the micro-teaching approach some institutions are now testing. Others include program learning, television instruction, sensitivity training programs, instructional teams, non-graded programs, and various approaches to teaching basic skills and knowledges to differing kinds of pupil populations. Helping schools to renew and modify curriculum content and emphasis represents another responsibility college personnel confront.

School systems that elect to become centers for clinical practice have obligations to help select and support the preparation of high-level clinical supervisors. They should also provide the kinds of reduced teaching loads

needed to permit time and energy for training teachers. Each center, also, should be prepared to provide certain resources needed by good programs of clinical practice. Prospective teachers should have opportunities, for example, to observe a variety of types of teaching, and at different levels of the school system. This means that the entire faculty should accept responsibility to help trainees as well as those serving as clinical supervisors. Needed in training centers, also, will be certain kinds of equipment such as that for video-tape feed-backs of teaching performance, facilities for using all kinds of educational technology, libraries of sample curriculum materials, conference and trainee work rooms, duplicating equipment and secretarial services.

The role of the State Board of Education, broadly interpreted, is one of leadership and assistance to schools and colleges. It should provide financial support to schools to help make possible quality conditions for clinical practice. Another need is for help to schools and colleges to arrange orderly assignments for trainees in practice stations. Financial support and leadership to stimulate research to improve pupil learning and related teacher development are other responsibilities the State Board of Education should be prepared to provide.

INCREASED FINANCIAL SUPPORT VITAL

The preparation of teachers and other educational personnel is expensive, as is the development of other kinds of professionals. Clinical training, particularly, is a high cost operation. Supervision of beginning or associate teachers during initial years of employment represents an added financial obligation of local school systems as does the in-service programs provided for all personnel.

In terms of financing quality programs of teacher education, it is signi-

ficant that wherever outstanding programs have been developed outside support has been a factor. For a few institutions, such help has come from philanthropic foundations that have taken an interest in improving the preparation of teachers. For others, in recent years particularly, it has come from the federal government. In some instances, business and industry have supported experimental efforts in schools and colleges.

On the average, Massachusetts institutions of higher learning engaged in the preparation of teachers spend \$1,175 a year per student for all aspects of their preparation. The range is from \$520 to \$2,620. These amounts approximate the expenditures for students enrolled in liberal arts courses which means that many colleges are making no added investments in programs to prepare teachers. The lower costs reported give a clue to the reasons some institutions have difficulty attracting and holding outstanding professors -- in either academic or education fields. They suggest, too, the overloads that staff members must have to bear, another detriment to quality in programs of preparation. The nine institutions that attempt to compensate cooperating teachers in school systems for the assistance they give to student teachers and interns pay, on the average, only \$80 for each trainee supervised.

As Dr. Robert Sperber pointed out to the Study Committee in his formal testimony, "Big doses of funds from the state are needed to attract additional outstanding subject area professors to give state college students a general education equivalent to the best in private colleges." Many private colleges and universities, too, have too little support for teacher education programs. The need is for sponsoring bodies to give a higher priority to the financing of teacher education as a matter of general policy. The Commonwealth of Massachusetts and local school districts need to provide additional financial support, as well, if teacher education is to be streng-

thened throughout the state. A point of beginning should be the provision of state and local district funds to help provide quality resources for supervised clinical practice for prospective teachers -- in both public and non-public institutions. Another is to allocate funds to stimulate research to improve teacher education.

RECOMMENDATIONS AND SUGGESTIONS

The need to reform teacher education is generally recognized. Individual institutions in Massachusetts already are attempting to strengthen internal involvement of faculty personnel in liberal arts in policy-making and experimental programs. Some academic scholars in the state are national leaders in the new curriculum programs. Likewise, some professors of education are recognized national leaders in their specialties. A number of colleges are seeking stronger ties with elementary and secondary schools to bring greater relevance to programs to prepare teachers for various types of service. Some of the experimental programs already developed help chart new designs and standards for preparing educational personnel.

Colleges and universities, acting independently, cannot reform teacher education. They need help from schools, the State Department of Education, the Massachusetts Legislature, the Federal Government, philanthropic foundations as well as business and industry. Achieving substantial changes will require broad scale cooperation to plan effective learning in schools that serve various types of clientele and related programs of preparation of educational personnel. The state and federal government will need to assist both public and non-public schools and colleges since all help to prepare teachers and all provide educational services that are vital. Such joint efforts can go forward without infringing on the autonomy and uniqueness of individual institutions.

Three key recommendations below suggest a priority that offers the greatest promise of improving the preparation of teachers and other school personnel in all kinds of colleges and universities. Other suggestions indicate possible directions for experimental programs and standards that may be appropriate.

Recommendations:

1. To improve the clinical training of prospective teachers the Massachusetts Legislature should appropriate funds, through the budget of the State Board of Education, to reimburse school systems that serve as training centers. The reimbursements should be made through contractual relationships that provide for the reductions in class teaching loads of qualified teachers who supervise and provide related pedagogical instruction to student teachers and interns in training. In some cases reduced loads for interns may need to be purchased as well. Funds will be needed also to provide training for clinical supervisors to assure high level professional services. Both public and non-public elementary and secondary schools should be asked to serve as training centers.
2. Statewide assistance to colleges and universities in the placement of student teachers and interns in training stations should be provided by the State Board of Education.
3. The preparation of educational personnel should be made a truly interdisciplinary, inter-agency responsibility. Academic professors should join in democratic partnerships with those in education; colleges and universities should work closely with elementary and secondary schools, the State Board of Education and other official agencies; professional associations should be involved; and the judgements of knowledgeable laymen should be sought. A

rule to remember is: teacher education is too important to be left exclusively to any one professional group.

Suggestions:

1. Local schools and institutions of higher learning, in cooperation with the State Department of Education sub-divisions and other appropriate agencies, should be encouraged to enter into research partnerships to:
 - (1) redesign learning experiences for elementary and secondary school pupils in situations where results have not been satisfactory, e.g. in inner-city and rural schools or with respect to the use of new curriculums;
 - (2) develop differentiated roles for teachers within instructional teams that include the use of para-professional personnel and the resources of educational technology; and
 - (3) test ways to prepare teachers and other educational personnel that are relevant to the new designs.
2. Elementary and secondary schools -- both public and non-public -- need to take greater responsibility for providing appropriate clinical training for prospective teachers. Teacher specialists should be developed to supervise student teachers and interns and to assist associate teachers develop professional competence. Such personnel should be capable of providing related instruction in the pedagogical sciences that here-to-fore has been the exclusive prerogative of college professors.
3. With school systems taking more responsibility for supervising the clinical training of candidates, college and university faculty members will have more time to train the teacher specialists, to provide consultant services to those who supervise prospective teachers

and to assist with research to improve pupil learning and related designs for teacher education.

4. Clinical training for educational personnel -- whether student teaching, internships or other types of practicums -- might well be freed from the traditional credit and marking systems that characterize college programs. Certain other professional courses would benefit from similar relief from formal marking and credit systems to permit more relevance to be developed with actual teaching situations.
5. Local school systems will need to take greater responsibility for keeping their programs of instruction up-to-date and self-renewing. Help can come from colleges and universities, the State Education Departments and the education industries. A part of such efforts should include providing relevant and varied ways for educational personnel to keep abreast of new knowledge and professional techniques. The utilization of systems resources and techniques offers additional promise for up-dating curriculums and educational services.
6. Greater specialization for teachers and other educational personnel may be expected to influence programs of preparation and in-service development in the future. Many secondary school teachers undoubtedly will concentrate on mastering one rather than several subjects. In fields such as science and the social studies, the scholarship of some may focus on one field and its cognate areas such as physics and mathematics or history and politics. Some elementary school teachers will prefer to have a field of academic specialization. Others may find specialization in several fields advantageous. All, of course, will need to achieve professional competence at particular levels, for the students taught and in

terms of plans for staff utilization. What really is needed, perhaps, for both secondary and elementary school teachers are new patterns of preparation that have maximum relevance to the types of performance capabilities that different kinds of teachers require.

The practice of permitting prospective elementary or secondary teachers to take a major in education courses -- long in disrepute -- might well be discontinued to permit broader emphasis on the basic liberal arts and sciences and greater specialization in teaching concentrations.

7. Colleges and universities, local school systems, the education profession as well as the state education agencies confront the question of quality of personnel admitted to programs of preparation. However good, programs of preparation and in-service education cannot compensate for poor quality of material. Because intellectual abilities are pretty well established by college age, the need will be to select for educational work those who possess the kinds and amounts that make for effectiveness. For those aspiring to achieve the ranks of professional teachers, sufficient ability to qualify for graduate study in an academic field of specialization might be a useful criterion. For para-professional personnel, or associate teachers who do not take full responsibility for professional decisions lesser capacity may be sufficient.
8. Programs of teacher education need to be better supported financially -- in almost all public and non-public colleges and universities in Massachusetts. The State should accelerate its appropriations for public institutions and insist that appropriate support be provided in this area. Non-public colleges and universities also will need both added financial help and commitments to

support teacher education programs more adequately.

Chapter 4

STATE RESPONSIBILITY AND LEADERSHIP

Education is a state function, historically and constitutionally. Massachusetts was the first state to establish a state department of education, which it did in 1837. By that time, however, the Commonwealth already had accumulated two hundred years of experience -- as colony and state -- with the concept of public education. The Massachusetts Constitution, adopted in 1780, made clear that "fostering learning" was a duty of the legislature and the Governor. Since its adoption, the General Court has passed various laws regarding the extent and quality of educational services that school districts are expected to provide.

The traditions of local autonomy in Massachusetts have tended to keep the relationships between the state and local school systems permissive rather than compulsory. Communities have had the freedom, for example, to accept or reject various kinds of state assistance, including financial support for schools. Thus, local responsibility and autonomy for education have remained strong with local school committees able to conduct schools pretty much as each sees fit.

LOCAL, STATE AND FEDERAL PARTNERSHIP

Recent changes in society and the role education plays in all aspects of life have stimulated pressures to re-examine the location of responsibility for education. These come from local school committees that are demanding more help. They generate from civic, business and industrial groups that are concerned about the overall extent and quality of education. They come, too, from parents who feel that their children are being shortchanged educationally by local policies and practices. Pressures multiply, also, from the organized educational professions whose members are discontent with the lack of responsiveness of some local communities to educational needs

and, consequently, are eager to establish uniform minimum standards on a wider base. Another force felt is the demand for better-educated workers for all kinds of employment. The scientific and technological developments of recent times have made the under-educated individual a burden too great for society to bear -- socially, politically or economically.

The pressures for higher and better quality educational productivity focuses primarily on state and federal responsibility and leadership for education. In one sense, they challenge the traditional autonomy of local communities. Underscored is the obligation of each school system to achieve educational standards -- for all children, youth and adults -- that are compatible with state and national requirements. Clearly enunciated -- by federal laws, congressional appropriations, and Supreme Court decisions, as well as by legislative enactments and policies established at the state level -- is each school district's responsibility to the total society throughout the sweep of history as well as to its local clientele at a given time. Rejected is the tradition that educational programs designed to fit the middle and controlling majority, or preferred by influential elite power blocks, are suitable for all. In effect, social changes now dictate that local autonomy ceases where educational failures begin. In its place, state and federal responsibility and resources are demanded to correct deficiencies identified.

Despite the need for broader leadership to improve education at state and federal levels, responsibilities of local school districts are increased rather than diminished. The traditions of self-government mitigate against centralized control. Also, the widespread interest and support required to make possible state and federal help for education must be generated at the local level. In addition, the nature of education, itself, requires that planning and decisions be kept close to local schools. For example, the process of learning is so intimate and individual and requires such close

home and school cooperation that the major responsibility for the quality of education always will remain within the separate communities.

What the times require is a new alignment of responsibilities and leadership -- one that makes full use of state and federal resources while preserving the traditions of local initiative for education. Such a partnership will be effective in Massachusetts only if it can avoid developing a rigid bureaucracy at the state level and keep federal assistance supportive of local and state policies.

STRENGTHENING THE STATE BOARD OF EDUCATION

Elementary and secondary education has made its greatest advances in the United States when given strong leadership at the state level. Historically, Massachusetts offers documentation for this fact. It was by the dynamic influence of Horace Mann, first Commissioner of Education in the Commonwealth, that public concern for popular education was first aroused. Under his leadership, which benefited the entire nation as well as Massachusetts, teacher education was improved and the philosophy of public education as we know it today largely was established.

Unfortunately, the type of bold leadership provided by Commissioner Mann and a few contemporaries in other states was not maintained for state education agencies. Jealousy over local control, political involvement, lack of financial support, insufficient authority, and absorption with the minutia of record keeping and reporting -- all have contributed to limiting the effectiveness of state leadership for education throughout the nation. In consequence, progress toward improving schools has been spasmodic, uneven and impoverished by poor support.

Recommendations of the Willis-Harrington Commission aim to reestablish the State Department of Education as a dynamic force to improve education in

all its aspects.⁸ The creation of a Board of Public Education is a significant first step. Its sharing of responsibilities with the Board of Higher Education brings a distribution of authority for leadership at the state level. The provision of an independent Advisory Council on Education, which is the sponsor of this study, provides the General Court with a unique and continuing instrument for keeping education abreast of the times. Recommendations of this study to improve the state's leadership to strengthen the certification and preparation of educational personnel aim to give extension to the Willis-Harrington Commission's proposals for reorganization of Massachusetts' state organization for education which already are being implemented.

RESPONSIBILITY FOR CERTIFICATION AND PREPARATION OF EDUCATIONAL PERSONNEL

The Massachusetts State Agency for elementary and secondary education was assigned responsibility for administering the state's certification law when it was passed in 1951. The legislation established certification as a requirement for all teachers in public elementary and secondary schools. It made United States' citizenship, good health, sound moral character, and a bachelor's degree a requirement for all teachers and other educational personnel. Other requirements, such as the specification of amounts of college credits required in major and minor fields and in pedagogical courses, were left to the jurisdiction of the Board of Education itself. These were developed by the professional staff with the help of ad hoc advisory committees composed of various kinds of professionals in education. Different cate-

⁸Willis-Harrington Commission recommended that the State Department of Education include agencies responsible for both elementary and secondary education and also higher education. Thus, the subdivision that compares with the state department of education in most other states now is called the Board of Education in Massachusetts.

gories of certification were added from time to time as needed or demanded. When approved by the Commissioner of Education, and now also by the State Board of Education, they have the effect of law.

The preparation of teachers, as a state function, originated under the auspices of the State Department of Education, with the founding of the first state normal schools at Lexington and Barre in 1837. Additional institutions were established -- with Hyannis being discontinued in 1944 and the Boston Teachers College and the Massachusetts Maritime Academy being added in 1952 and 1964 respectively -- to bring the number, including the Massachusetts College of Art, to eleven at present. In line with national trends the two-year normal schools were expanded into four-year teachers colleges. Additionally, the preparation of high school teachers was undertaken along with those for elementary schools, with various specialties being adopted by different institutions. The State Teachers Colleges were made multi-purpose institutions and their names changed to state colleges in 1960. Until 1963, the state colleges were under the control and direction of the Commissioner of Education. At that time they were given a common Board of Trustees and placed under the general authority of the Massachusetts Board of Higher Education, along with the University of Massachusetts, the State's Technical Colleges and Institutes and the Regional Community Colleges.

Administration of Certification

The certification of teachers and other educational personnel, e.g. principals, supervisors, superintendents, is now administered under the State Board of Education by a Bureau of Teacher Certification and Placement. The Bureau, headed by a director and provided with two additional professional staff members, is part of the Division of Administration and

Personnel. Since 1951 certain records of the Bureau of Certification and Placement have been kept by the Division of Research and Development which provides data processing services for various divisions. Its resources for handling information are greatly updating what is known about the qualifications of teachers in public schools, their teaching assignments and mobility, all of which has been an invaluable resource in this study.

The staff of the Bureau of Teacher Certification and Placement receives applications and recommendations for certifications, analyzes transcripts, issues certificates -- or licenses -- and keeps a file of transcripts and actions on applications as well as a record of certificates awarded. Inasmuch as 84,110 certificates were issued over a twelve year period -- 8853 of them from July 1, 1966 to June 30, 1967 -- it is clear that the staff of the Bureau carries a heavy load. With only three professional staff members, it is understandable that little time is available to do more than keep the certification process operating. Under present conditions it is unrealistic to expect more than cursory help to be given to schools and colleges to improve teacher education or even the present program of certification.

Certification, as presently conceived and administered by the State Board of Education, is a gate keeping operation. The staff is expected to maintain without deviation the requirements for licensure to practice. Changes that will come under present concepts and procedures can be expected to build higher prohibitions that restrict the flow of talent rather than find ways to attract more able personnel. The fault, it must be remembered, is not with staff members responsible for the operation, but rather with the system itself. The new approaches to certification recommended by this study will require changes in the way the State Board of Education organizes

its resources and relates to schools and colleges.

Authority for Programs of Teacher Education

With the transfer of the state colleges to the Board of Higher Education authority for all programs to prepare educational personnel in public institutions became centered in this agency. The Willis-Harrington Commission recommended that the State Board be empowered to authorize programs, plan enrollment distributions, establish staffing formulas and standards, approve degrees to be granted, assess the quality of results and to relate financial support to goals and functions of institutions.

Authority for educational research and the offering of extension programs and continuation services to educational personnel was recommended by the Willis-Harrington Commission for both the state colleges and the University of Massachusetts. Functions of the regional community colleges permit these institutions to provide some of the lower division work that prospective teachers require and to offer training for certain kinds of technicians who may work in schools. Technological Colleges and Institutes fall into the category of teacher preparing institutions in certain of the special fields.

Dual Responsibility and Accountability

The Massachusetts allocation of responsibility for certification and preparation of educational personnel fixes a dual responsibility and accountability. The State Board of Education clearly holds authority for developing standards for educational programs in elementary and secondary schools that will influence the kinds and quality of personnel required and the nature of their preparations. It also has specific authority for the setting of standards for the preparation of teachers and other educational personnel, which it exercises through the certification process. At the same time the Board of Higher Education is charged with the overall responsibility of

approving programs and degrees, allocating staff, judging budget requests assessing the effectiveness of institutions that have as one of their several functions the preparation of educational personnel.

Such division of responsibility is common to practices in certain other states. It has the possible advantage of giving to the certification and preparation of educational personnel a counterbalancing of authority and responsibility that can mitigate against monolithic regimentation. It carries with it the danger, however, that standards recommended by one Board will not be supported by the other. The history of teacher education suggests that too often the latter has been the case. If dual responsibility for the quality of educational personnel is to be made to work, quite clearly a new kind of mechanism is needed. Not only will such agency need to achieve cooperation between the State Board of Education which sets standards and the Board of Higher Educations which controls programs, it will have to find ways of achieving involvement of school and college faculties -- both public and non-public -- and, also, of the professional and citizen groups that are concerned with the certification and preparation of educational personnel.

A PROPOSED COMMISSION ON CERTIFICATION AND PREPARATION OF EDUCATIONAL PERSONNEL

Early discussions with Dr. William Gaige, Director of Research for the Massachusetts Advisory Council on Education, focused on the need for a new kind of mechanism for setting standards and procedures for certification and to provide statewide leadership to improve the preparation of educational personnel. Of concern was a way to achieve involvement of various professional and citizen groups that are concerned with the quality of education as well as practical procedures for achieving cooperation among local schools and colleges -- both public and non-public -- and

appropriate state agencies. Subsequently, when it was learned that Dr. James D. Koerner, member of the Study Committee, had given considerable thought to such a possibility as a part of his study of teacher education in certain other countries, he was invited to formulate a position paper on this subject, which he did and presented it to the Third Advisory Conference on February 3, 1968.

The suggestions developed by Dr. Koerner centered on the need for an agency, perhaps to be named the "Massachusetts Licensing Board" to take full responsibility for what is now called certification. Such a Board, he proposed, should be composed of perhaps fifteen persons who would be selected from the ranks of: (1) experienced classroom teachers; (2) outstanding members of college and university faculties -- whether professional educators, or scholars and academicians with a demonstrated interest in public education; and (3) distinguished laymen drawn possibly from local school committees. Ex officio representation from other groups was seen as a possibility. Members, however, would function independently without obligations to groups from which they might come. Such a Board, Koerner stressed, should be related to the State Board of Education but given full authority over the certification of school personnel -- "in but not under," with freedom and responsibility to act, rather than merely advisory powers. It could be appointed by an appropriate authority, the State Board of Education itself, the Governor, or the Advisory Council on Education -- after consultation with appropriate professional and scholarly state and national groups. To operate, the Board would have its own administrative staff and might well follow the policy of creating sub-panels in the different subject fields to recommend precise standards.

The plan outlined by Dr. Koerner, which pulled together many ideas ad-

vanced by members of the staff and the study committee (See Vol. II for full description) received a favorable response from a large majority of those in attendance at the Third Advisory Conference. It found general support, also, in a subsequent meeting of the Study Committee. Of concern to the Committee were possible operational arrangements that would clarify the relationship of such a body to the State Board of Education and other agencies -- assuring independence for action but not exemptions from proper accountability. Of interest, too, were ways to constitute the membership of the body to provide appropriate representation of all key professional groups while avoiding control by any. The possibility of expanding the responsibility of the proposed agency to include leadership to improve the preparation of educational personnel as well as the task of administering the recommended program of support and coordination for clinical training was also considered.

Out of the discussions with Dr. William Gaige as well as from ideas he elaborated in writing to me, the proposal presented by Dr. James Koerner, suggestions made by members of the Study Committee and officials of the State Board of Education has grown the following proposed model for a Commission on Certification and Preparation of Educational Personnel. The intent is to suggest the general nature of the agency, its authority, possible composition, responsibility and relationships rather than to project a rigid design. Modifications are possible and may be found to be desirable as the model receives more general study. Those responsible for establishing and administering such a Commission are cautioned, however, to give it the kinds of protection that will ensure against political influences -- both from within and outside the education professions. Of importance, also, will be maintaining balanced representation on the Commission from

various key professional and citizen groups -- particularly classroom teachers and academic scholars -- that have a direct interest in the certification and preparation of educational personnel. The Commission should be made a part of the Massachusetts Board of Education by legislative action to assure its status and authority.

Proposed Model

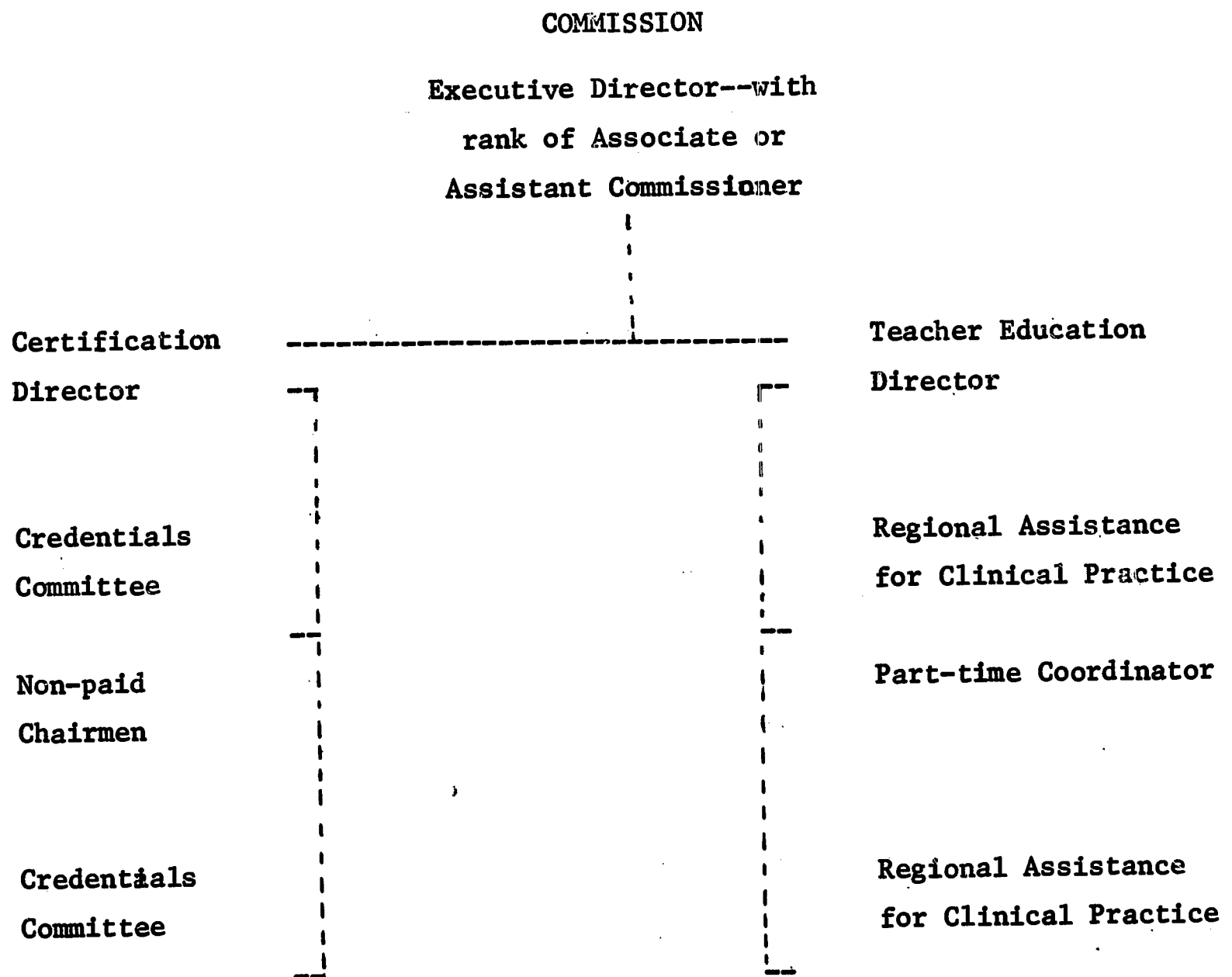
Title: Commission on Certification and Preparation of Educational Personnel. Two categories of functions are indicated:
1. certification; and 2. leadership to improve programs of preparation. (Illustrated in Figure I). It could be called a "Board" as is the practice in other fields except for the confusion that might result from the link proposed with other boards in the State Department of Education.

Legislative Authorization: It is suggested that the General Court establish, by statute or resolution, the Commission as an adjunct agency of the State Board of Education and the Board of Higher Education, with administrative relationships being with the State Board of Education.

Authority and Relationships: As a part of the Department of Education and an adjunct sub-agency of its two governing Boards, the Commission should be delegated by such agencies quasi-legal authority to establish and administer statewide standards and procedures for the certification of all educational personnel for elementary and secondary schools. It should be given responsibility, also, for administering the program of state support for clinical practice recommended

Figure 1

SUGGESTED ORGANIZATION AND STAFFING FOR COMMISSION



in Chapter 3 and authorized to provide leadership to improve the preparation of educational personnel.

The Commission should be accountable through its Executive Director to the Commissioner of Education and the Board of Education. It should maintain liaison relationships with appropriate Divisions and Bureaus under the State Board of Education, with the Board of Higher Education and the Trustees and institutions under that body that prepare educational personnel, with non-public colleges and universities that prepare teachers, with elementary and secondary schools -- including non-public institutions that utilized certified personnel -- with local school committees and with state and national professional associations. (See Figure 2 for diagram of proposed relationships).

A continuing relationship with the Massachusetts Advisory Council on Education is suggested to: (1) help establish the Commission; (2) to formulate slates of nominees for membership on the Commission; and (3) to assist with periodic assessment of the effectiveness of the Commission's efforts.

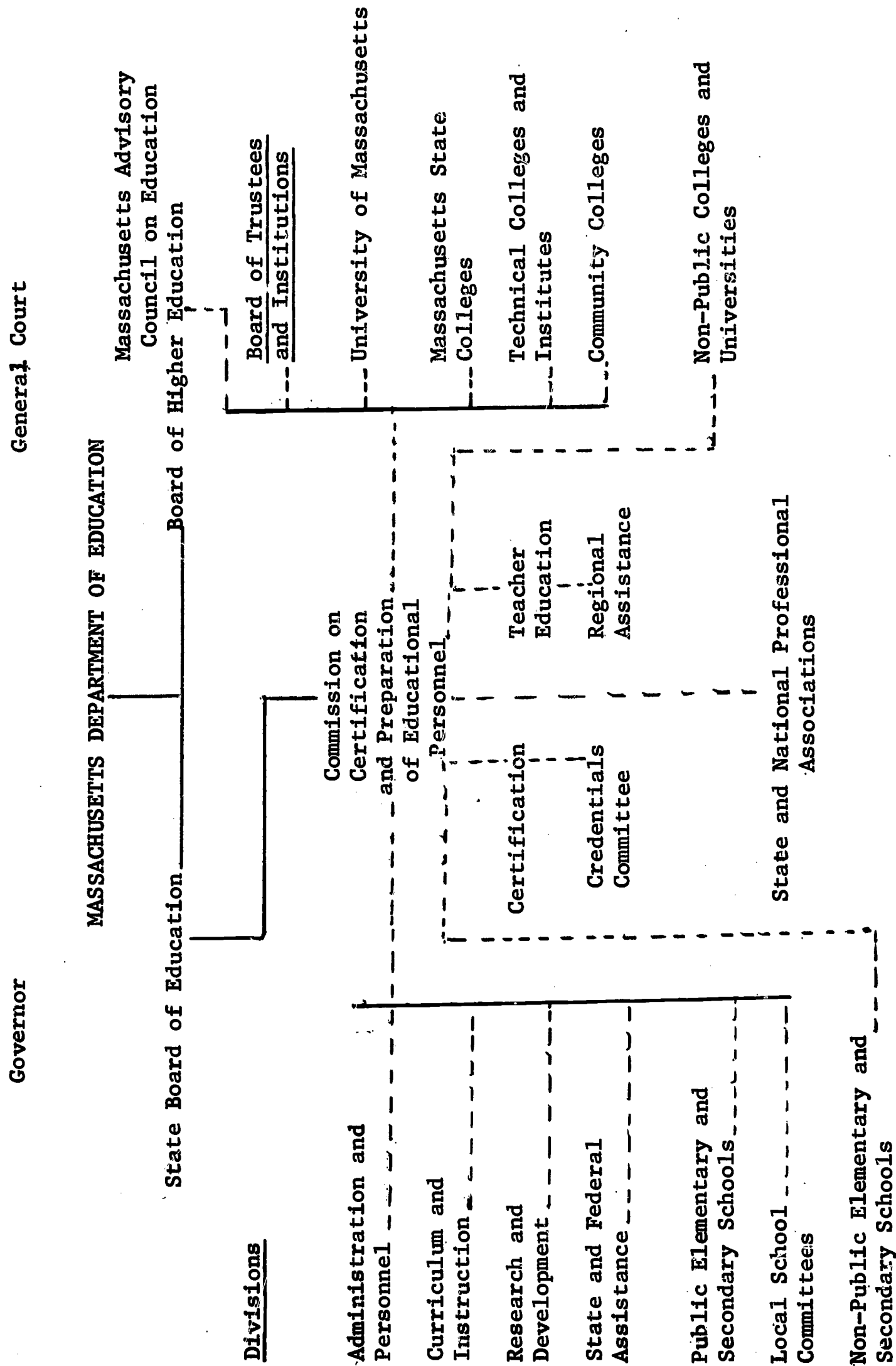
Membership:

It is suggested that the Commission be composed of not more than fifteen members drawn from the following sources:

Elementary and Secondary School teachers	-- six members
Auxiliary specialized personnel	-- two members
College and University professors	-- five members
Lay representation	-- two members

Figure 2

PROPOSED RELATIONSHIPS OF COMMISSION WITH OTHER AGENCIES



In addition, ex officio representation should be obtained from key professional associations, the State Board of Education, the Board of Higher Education and possibly the Massachusetts Advisory Council on Education and the General Court itself.

In constituting the membership of the Commission, the objective should be to maintain a healthy mix of professionals and laymen who represent different fields and specialties as well as to include individuals who are held in general high regard throughout the Commonwealth.

It is suggested that members of the Commission be appointed by the Board of Education on recommendation of the Commissioner of Education from slates of nominees prepared by the Massachusetts Advisory Council on Education. Terms should be not less than five years duration and should be so alternated to assure continuity of membership.

Organization and
Administration:

The Commission should be provided a professional staff adequate in proficiency and size to carry out its work. The appointments should be made on the basis of recommendations of the Commission to the Commissioner of Education and approved by the State Board of Education. Staff members should be accorded the same employment conditions as are available to the various Divisions of the Board of Education. The Director probably should have the status of Associate or Assistant Commissioner with appropriate salary and other perquisites. The person selected should be a leader in teacher education, knowledgeable about designing

research, capable of generating cooperation among the types of groups involved as well as an able administrator. Envisioned is the quality of person who might serve as dean or president in a college or university.

The staff of the Commission is not envisioned to be large since present certification and data processing resources can continue to issue licenses and keep records. Needed, however, will be high quality professional personnel. A possibility for staffing some of the leadership functions of the Commission is to use on a rotating basis some people on leave from schools and colleges. Such arrangements would give the Commission high level professional staff competence and at the same time would tend to keep it in close touch with grass roots thinking of professionals in the fields.

Assisting colleges and universities with the placement of student teachers and interns possibly will require that certain staff members be located in various sections of the state. Part-time appointments of persons in schools and colleges in appropriate regions may be a useful pattern here.

Division of

Responsibilities: This study recommends that Massachusetts distinguish between certification and licensure, both in definition and the administration of the two functions. The Commission should be responsible for formulating standards and procedures and for certifying educational personnel as qualified for a license to practice. Legal licenses

should be issued by the Bureau of Teacher Certification and Placement (whose title perhaps should be changed to Bureau of Professional Licensing and Placement). The Division of Administration and Personnel, of which the licensing Bureau is a subdivision should continue to be responsible for long-range projections of personnel needed for schools, as recommended in Chapter 1.

The Division of Research and Development should continue to maintain complete information about personnel licenses, including judgements of performance and experience records, as well as trends in supply and demands. It can provide, also, among its various data processing services, a continuing feed-back to the Commission relative to the reported success of personnel certified by different procedures.

Financial
Support:

The Commission's work should be given financial support by the General Court through the budget of the State Board of Education of three types: (1.) an operating budget for the certification responsibilities; (2.) funds to reimburse school systems for providing resources for clinical practice for prospective teachers; and (3.) nest-egg type appropriations to be used to stimulate pilot research by colleges and school systems to improve the preparation of teachers in critical areas, such as rural and inner-city schools. The Commission should be free, also, to seek special help from foundations, the educational industries and the federal government or supplement those

provided by the state of Massachusetts.

RECOMMENDATIONS AND SUGGESTIONS

To make possible the new approach to certification of educational personnel and to strengthen the state's leadership to improve teacher education, as recommended by this study, the following recommendations and suggestions indicate needed courses of action.

Recommendations:

1. The General Court should authorize the creation of a new subdivision by the State Board of Education to which should be delegated full responsibility for the certification and improving the preparation of educational personnel for elementary and secondary schools. It should have adjunct relationship to the Board of Higher Education as well as to the State Board of Education and liaison relationships with all bodies that are concerned with educational personnel. The new body, which could be administered similarly to the present Division of Library Extension, might be called a Board or Commission for Certification and Preparation of Educational Personnel. It should be accorded quasi-legal powers to perform its duties and given such other protections as may be needed to guard against political pressures -- from within or without the education professions. Its composition should provide for a balanced representation of able and respected teachers and academic specialists from both public and private schools and colleges or universities as well as key laymen representing school committees or other citizen groups. Its authority should be to develop and administer standards and procedures for the certification of educational personnel, to provide leadership and to coordinate resources for the improvement of teacher education and to administer the plan of support for clinical training proposed by this study.

2. Presently operating agencies of the State Board of Education should continue to project the requirements for educational personnel, issue official licenses for various kinds of educational practice, maintain comprehensive data on the personnel licensed, and to assess the effectiveness of educational programs.

3. Increased financial support should be provided for the preparation of teachers in the state colleges and the University of Massachusetts. The objective should be to make the programs of preparation, particularly in the areas of general education and subject specialization, equal to the best in the private colleges. At the present time some state institutions spend less per student annually to prepare teachers than the better high schools do to educate their students. Compared to the support provided for preparation for other professions, teacher education is woefully under-supported, in both public and non-public institutions.

4. The Massachusetts Advisory Council on Education should continue to provide assistance to the State Board of Education and other agencies to help enact the recommendations of this report. It should be given the continuing responsibility of preparing slates of nominees for Commission membership whenever needed, and should periodically help, as needed, to assess the effectiveness of the Commission's work. The Committee that helped with this study might be asked to continue to provide assistance until the new commission has been activated.

Suggestions:

1. The proposed model for the Commission on Certification and Preparation of Educational personnel, presented in this chapter, indicates general guidelines for establishing, staffing and operating the agency

to be charged with responsibility for certification and leadership to improve teacher education. It is believed that the new sub-organization of the State Board can function much as does the present Division of Library Extension; thus, the proposals do not require changes in policies or structure of the State Board of Education. Key to the success of the new Commission in the area of Certification will be the use of sub-task forces, or Credentials Committees, to define performance standards for various teaching and other educational specialties. It is suggested that membership of Credentials Committees be made representative of the various professional groups related to each field with classroom teachers being given key roles.

2. In developing and financing the work of the Commission, it is suggested that priority be given to Certification. The development of a program of support for clinical training of educational personnel might well be considered as a second phase of the operation. Support for pilot research on aspects of teacher education might be sought as schools and colleges are ready to use this kind of help.

3. The Commission should develop alternate ways to demonstrate qualifications for licensure that while protecting against incompetence will assure resilience and be adapted to individual differences in candidates, preparing institutions and performance requirements.

4. Schools and colleges should be encouraged to research ways to improve pupil learning in elementary and secondary schools with opportunities for the preparation of personnel needed built into the experiments. The objective should be to prepare personnel to perform in particular school situations, rather than to make all approaches to instruction conform to the preparation, as is too often the case at present.

5. The Commission will undoubtedly find it necessary to help schools

1
2
0

and colleges to prepare teacher specialists to supervise the clinical training of student teachers and interns. With state help available, a new type of clinical supervisor may be developed in Massachusetts schools.

6. The new Commission will undoubtedly have to establish priorities for the development of standards and implementation of new procedures for certification of personnel. It should be able, however, to build from the work that various special groups have already done in this area.

7. Although the central concern of the Commission is educational personnel for elementary and secondary schools, other kinds of educational workers might be placed under its jurisdiction as well, subject, of course, to the preferences of agencies involved. For example, instructors in correctional institutions, now classified as civil service workers under Section 4, Chapter thirteen, of the Civil Service Law, might more appropriately be certified by the Commission. If Community Colleges desire to employ licensed personnel, they, too, could come under the Commission's jurisdiction. In cases where such groups seek certification through the Commission, Credentials Committees will need to be established to develop standards and procedures appropriate to their professional needs.

3

Chapter 5

TIME TABLE FOR ACTIONS

This study calls for basic changes in both the approach and procedures for certification of educational personnel. It proposes, in addition, that Massachusetts provide at the state level support to strengthen programs of clinical preparation for educational work and also nest-egg appropriations for pilot research to improve teacher education. Enacting the recommendations will require a number of specific policy decisions by the Massachusetts General Court, the State Board of Education, the Board of Higher Education, institutions of higher learning, elementary and secondary schools as well as various professional organizations. Individuals preparing for and engaged in professional work in education will confront choices as well. To be successful, general understanding and support -- within and outside professional ranks -- will need to be achieved.

It will be possible, as well as desirable for various agencies to move simultaneously to achieve the goals of this report. Actually the State Board of Education has the authority to initiate the creation of the proposed Commission while changes in General Court legislation and budgetary appropriations are being sought. Colleges and universities can develop their own plans to base certification on performance so that such will be ready for submission to the Commission, once it is in operation. School systems can work with State Board officials to adapt personnel policies to the proposed differentiations of professional competence.

The academic year 1968-1969 should be viewed as a year of change-over to the new plans. During this period, the budget will have to be submitted, necessary enabling legislation will need to be passed, the Commission for Certification and Preparation of Educational Personnel created and staffed and priority Credentials Committees appointed. Important during this

period will be a program of public information to help everyone to understand not only what is being done, but also, the steps involved in the process.

Because present certification laws give authority to determine standards to the State Board of Education, the Commission can be delegated responsibility to establish standards and make recommendations for certification just as soon as it is operative. It can then move immediately to approve plans of colleges and universities to base recommendations for certification on performance. The recommended program of state support for clinical practice can be instituted as soon as the Commission is functioning and funds are available. It is suggested, however that this development be undertaken in a series of stages to assure sound planning. Level of state financial support will be a governing factor as well.

Actions by the Massachusetts General Court:

1. As soon as possible after this report is received, the Massachusetts General Court should modify present certifications statutes to: (a) discontinue the policy of making prescriptions for certification, such as the citizenship requirement, by legislative enactments; (B) authorize or request the State Board of Education, with cooperation from the Board of Higher Education, to establish the proposed Commission for Certification and Preparation of Educational Personnel; and (c) transfer complete responsibility for the certification of all educational personnel to the new Commission. To indicate the kind of legislation needed, a sample act is included in the appendix of this report. Such a proposal for legislative action will need to be introduced by December 6, 1968.

2. The General Court will need, also, to appropriate funds as requested by the State Board of Education (as suggested in the Appendix) to: (a) support the new program of certification; (b) to reimburse school sys-

tems that provide resources for clinical training of educational personnel; and (c) to make possible pilot experimental efforts to improve the preparation of educational personnel.

Actions by the State Board of Education:

1. The State Board of Education should ask the General Court to modify existing certification laws as indicated above. The Board should establish the Commission for Certification and Preparation of Educational Personnel as a quasi-legal adjunct agency of the State Board of Education and the Board of Higher Education, with responsibility to the former body.

2. The Chairman of the State Board of Education should ask the Massachusetts Advisory Council on Education to provide a slate of qualified candidates for membership on the Commission. The Commissioner of Education should be asked to make recommendations for appointments from the list provided, but the board of Education should be free to choose alternatives recommended by the Council. In providing its slate of candidates the Council should confer with appropriate agencies and professional bodies, such as the Massachusetts Teachers Association and its sub-divisions, the Board of Higher Education, Associations of College Professors, the Association of Independent Schools, Catholic Education Associations, and the Association of School Committees.

3. The State Board of Education should request the Massachusetts General Court to appropriate funds to support the work of the Commission in three different categories: (a) to maintain the new program of certification; (b) to reimburse school systems for resources for clinical training of educational personnel; and (c) to support pilot research to improve the preparation of educational personnel in critical areas. General estimates of the kind of budgetary support required for each of these functions are included in the appendix of this report. Budget request will need to be

presented to the General Court by September 15, 1968.

3. The Board of Education will need, also, to define working relationships between existing departments and Bureaus and the new Commission as well as the kinds of cooperation desired with other agencies, such as the Board of Higher Education and the professional associations.

4. When the membership of the Commission has been appointed it should select its own chairman and move immediately to recommend to the Commissioner of Education and State Board of Education qualified candidates for the position as Director of the Commission. Subsequently, other staff endorsements should be made by the Commission on the recommendations of the Director. The actual employment will be by the Board of Education on the recommendation of the Commissioner of Education.

5. When staff officers have been appointed, the Commission should:

- (a) establish priorities for developing standards for certification;
- (b) create sub-credentials committees in line with the priorities agreed upon;
- (c) formulate general policies for certification by types, standards and procedures. It should then invite institutions that prepare educational personnel to submit plans to judge performance capabilities for candidates to be recommended for certification.

6. The program of support for clinical training should be initiated as soon as funds are available, hopefully by the academic year 1969-70.

7. The Commission perhaps in cooperation with the Massachusetts Advisory Council on Education, and possibly with help from the Regional Research Laboratory, should encourage schools and colleges to experiment with ways to improve pupil learning and the related preparation and utilization of educational personnel in critical areas, such as in inner-city and rural schools, or the use of new curriculums. Funds provided by the Mass-

achusetts General Court should be made available to support pilot efforts. Additional support should be sought from the federal government, philanthropic foundations as well as business and industry.

Actions by Colleges and Universities:

1. Colleges and universities that prepare educational personnel should initiate immediately interdisciplinary planning to decide ways in which they desire to prepare teachers and educational workers when performance rather than course credit accumulations is the basis for certification decisions. Each institution will need, also, to propose to the Commission on Certification and Preparation of Educational Personnel the procedures it desires to follow in judging qualification for certification.

2. Institutions that provide clinical training of educational personnel will need to: (a) define the type and numbers of clinical stations needed; (b) indicate preferences with respect to clinical supervisors, school systems and geographic location; and (c) suggest contributions college faculty members can make to the training of clinical supervisors and to other types of assistance with the program.

3. Colleges and universities should work closely with school systems to relate the preparation of educational personnel to modified approaches for student learning and the new designs for utilizing staff resources and educational technology.

Actions by School Systems:

1. Local school systems should move as rapidly as possible to adapt all personnel policies to the proposed new staffing formulas and differentiations of teaching competence. In doing so, it will be important to recognize the need for clinical supervisors to be given reduced loads to provide time to work with student teachers and interns.

2. Plans developed to make differentiated use of staff resources

should provide appropriate assignments for beginning or associate teachers. Involved may be reduced loads, team teaching assignments, supervisory help, or other kinds of in-service assistance.

3. Each school system will need to determine the ways in which it will help educational personnel maintain adequate levels of professional performance as a basis for license renewals.

4. Schools should take initiative to form coalitions with each other, institutions of higher learning and other agencies to research critical problems of pupil learning and the related preparation of educational personnel.

Action by Professional Associations:

1. Professional Associations, particularly the Massachusetts Teachers Association, should initiate programs of study and information relative to the new approaches to certification and the improvement of teacher education.

2. It will be vital that professional associations support the proposed actions by the General Court, the State Board of Education as well as the schools and colleges.

3. Professional Associations should continue to provide leadership to help develop suitable standards for certification of various kinds and qualities of educational personnel. The new Commission, in both its conception and composition, gives greater opportunity for leadership by professional groups than has heretofore been possible.

Action of School Committees:

1. Local school committees should move immediately to study and to test the proposed staffing formulas suggested in Chapter 1.

2. Existing personnel policies, such as employment standards, tenure

regulations, salary scales and staffing formulas, should be adapted to support the proposed levels of certification of educational personnel.

3. In addition to state appropriations for research to improve schools, local school committees will need to allocate financial support for this purpose -- as many already are doing. An objective might well be to invest from two to five percent of the annual operating school budget in research and development.

APPENDIX

Sample Legislation:

Sample Legislation is available from the Massachusetts Advisory Council.

Budget for Certification Activities:

The initial budget to support the staff and Commission's activities in the area of certification should be requested by the State Board of Education in its September 15, 1968 budget to become effective January 1, 1969. Possible items and amounts to be included are as follows:

Personnel:

Executive Director	\$20,000.00
Assistant Director for Certification (one-half year)	7,500.00
Secretaries (one)	6,000.00

Supplies and Equipment:

Office Rental, furniture and equipment*	5,000.00
Office supplies	2,000.00
Travel and Expenses for staff Commission and Credential Committee members**	3,500.00

Total	\$44,000.00
-------	-------------

* It will be desirable for the Commission to be housed with the State Board of Education if space is available.

** Commission and Committee members are expected to serve without pay. Funds will be used to cover expenses to meetings.

Suggested Budget for Clinical Practice:

It is suggested that school systems initially be reimbursed for reducing the loads of classroom teachers who supervise the clinical practice of student teachers and interns at the rate of \$300.00 per trainee assigned. The funds would go to the School Committee to help defray costs of additional personnel required. This amount represents a state contribution rather than an assumption of complete costs. It is assumed that school systems gain certain benefits from serving as training centers; hence, they reasonably should be expected to bear some of the costs which may include, incidentally, higher salaries to clinical supervisors. Additionally, colleges and universities may be expected to help defray costs. Some institutions, particularly will desire more extensive services from training centers than would be typical; they should expect to make up the differences in costs from their own resources.

Time may be required to develop the kind of training centers that qualify for state support. Orderly cooperation among schools and colleges will require time to achieve as well. It is suggested, therefore, that the State's program of support for clinical practice be developed gradually over a four-year period with the first year, 1969-70, devoted primarily to selecting training centers, choosing and providing orientation for classroom clinical supervisors and organizing an initial pilot placement program. The subsequent three years can then be used to achieve orderly expansions of the program to those colleges and school systems -- both public and non-public -- that desire to participate.

Suggested budgetary appropriations that will be required to establish such a program of support over a four year period are shown below:

1969-70	1970-71	1971-72	1972-73
\$125,000	\$650,000	\$1,260,000	\$1,865,000

The budget for 1969-70 might well provide for the following costs:

Personnel:

Director	\$15,000
Secretary	6,000
Training courses for classroom supervisors, payments of tuition for enrollees	25,000

Supplies and Expenses:

Office supplies	1,500
Travel for staff	2,500
Reimbursement to school systems in pilot programs -- Estimated to involve 500 trainees for one semester	75,000

Total	\$125,000
-------	-----------

Suggested Budget for Pilot Research:

Nest-egg type funds to initiate pilot research to improve teacher education are expected to produce additional support from such sources as the federal government, philanthropical foundations, the educational industries and local school districts. The need is to provide some help to assist schools and colleges to test promising approaches to the point that other support can be attracted.

Some funds will be needed to research the certification plan itself. It will be important to measure the effectiveness of the new program as it develops to make certain that it is achieving its purposes.

It will not be possible, likely, to initiate research during the first year of the Commission's operation, 1969-70. In the budget for the following year, 1970-71, the Commission should be encouraged to request such funds. Initial annual requests might be in the range from \$50,000 to \$100,000 to illustrate the level of support that might be needed to provide statewide leadership to improve teacher education.

THE PROPOSAL: A STUDY OF TEACHER EDUCATION

THE MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

June 4, 1967

A STUDY OF TEACHER EDUCATION AND CERTIFICATION
IN MASSACHUSETTS TO BE CONDUCTED
DURING 1967-1968

INTRODUCTORY STATEMENT

One of the first determinations by the Advisory Council was to cause to be conducted a study of teacher certification and teacher education in Massachusetts. In consequence, its Director sought the advice of a number of leading educators in and out of the State. As a result of this advice and a subsequent search for an outstanding person, the Advisory Council engaged Dr. Lindley Stiles of Northwestern University to direct its study.

Following meetings on May 19 at Harvard University with a small group of advisors and with the Commissioner of Education and his assistant commissioner in charge of certification and in consultation with the Council's Director, Dr. Stiles prepared the following outline of the proposed study. The outline is subject to revision and extension as a result of the July 7th meeting and subsequent considerations.

THE PROPOSAL

In Massachusetts, as elsewhere, laymen as well as professionals are concerned about the preparation and certification of teachers and about their in-service development. This anxiety generates from an awareness of the vital role of education in the development of human resources and the recognition of the obvious fact that the nature and quality of educational services are determined largely by the quality and nature of teaching. Added interest comes from forces and developments of the times: expanded demands for educational opportunities; vast numbers of culturally disadvantaged virtually untouched by existing school programs; increased mobility of both students

and teachers; greater dependence on science and technology as well as knowledge generally; expanding cultural conflicts; the broadening of concern about human values, particularly among young people; unrest within the teaching professions themselves; and the opening potentialities of the developing educational technology. An overriding consensus supports the premise that the preparation and certification of teachers are too important to be taken for granted; rather, systematic study and planned development is the course of wisdom. They are the just concern of all.

The one specific charge which the Willis-Harrington Commission made to the Advisory Council on Education upon its formation was that it make a study of teachers' certification in Massachusetts. Any examination of the problems of teachers' certification results in the conclusion that it is inseparable from teacher education. Thus this study deals with both. The Advisory Council is conscious of the progress and pioneering that already mark the leadership of various colleges and universities that prepare teachers and other educational personnel within the Commonwealth. It is aware that Massachusetts pioneered in the education of teachers. It is also aware that Massachusetts' unique history and traditions make it different in certain ways from other states. Yet despite past accomplishments and accepted customs, the conviction prevails that the preparation and certification of teachers is of high importance. There appears to be general agreement that considerable improvements may be accomplished in the standards which the state sets and in the practices of many institutions educating teachers. Professionals, including officials in the State Department of Education, teachers and administrators in the schools, as well as experts in teacher education in public and in private colleges and universities give strong support to the decision to make this study. The objective envisioned by all is to accelerate the rate of im-

provement, to build upon and to multiply successful practicing already established, and to open additional alternatives for improvements as well as to expand resources.

POLICIES AND PROCEDURES

Responsibility for organization of the study under the Advisory Council is lodged with Dr. William C. Gaige, Director of Research of the Council. Tentative plans call for the assembling by the Director and the Council of an Advisory Committee to the study to suggest policies for the project, to guide its development, and to make recommendations based upon the results. This body will be composed of representatives of the key agencies and organizations interested in teacher certification and teacher education in the state, including lay as well as academic and professional groups. Its task will be to keep the study on course, to set priorities of concerns, to provide interpretation of expectations and traditions, and to judge proposals for action. Members of the Council and members of the Council's legislative Advisory Committee will either sit directly on this Advisory Study Committee or will participate directly as units in the formulations and interpretations.

The study will be directed by Dr. Lindley J. Stiles, Professor of Education for Interdisciplinary Studies, Sociology and Political Science, Northwestern University, and former Dean of the School of Education at The University of Wisconsin. He has just finished directing a study of teacher education for the state of Hawaii. He will be assisted by selected consultants who are specialists in the various problems under consideration. The School of Education at Boston University, hopefully, will provide administrative assistance and staff resources to gather and organize data.

Assistance in charting the focus of the study and in gathering and interpreting information will come from the State Department of Education, colleges

and universities engaged in the preparing of teachers, as well as from school systems and various professional educational groups. Discussions are already under way aiming to identify the key questions that professionals on the firing line and laymen consider most important to be investigated. Early hearings will be scheduled by the Study Committee, and the project staff is expected to probe more broadly for help in forming priorities. Extensive involvement of the leadership for teacher education in Massachusetts is envisioned throughout the project.

In addition to the data that will be collected, ideas and professional judgments will be sought to help the staff define desirable standards and to project possible models for improving practices and procedures. A number of working conferences are anticipated to ascertain the views of selected lay as well as academic and professional leaders on policy matters under consideration. Proposals developed by consultants to the study will be submitted to such conference groups for discussion as one process of refinement prior to the final formulation of recommendations.

The time schedule calls for the final report to be prepared and approved by the end of June, 1968. The Study Committee will be formed, and tentative plans will be developed during the current summer. In September 1967, initial meetings of the Study Committee will provide opportunities for hearings of the ideas and suggestions and decisions relative to the scope and priorities of the investigation. A key decision will relate to how much can be accomplished within the time and budgetary resources available. Should a comprehensive study of all aspects of teacher education be the prospect, certain phases of the investigation will no doubt need to be extended beyond the one-year time presently contemplated. The task of gathering data on present practices is expected to get

under way immediately, since the kind of information desired can be anticipated. The work conferences are expected to be scheduled during the fall and the early winter.

The Advisory Council hopes that the study will, as early as possible, announce broadly the problem areas that it identifies and possible alternatives to their solution. Such steps will make possible the involvement of larger numbers of concerned persons as the study progresses.

BASIC ASSUMPTIONS

Underlying the examination of policies and procedures for preparation and certification of teachers are certain basic assumptions that provide direction, help to shape proposals for action and also define responsibility. Key among these are the following:

1. Knowledge about children and youth and how they learn, knowledge about cultural and psychological factors underlying individual differences, and change and vast proliferation of knowledge in old disciplines and the development of new ones, and the rapid development of educational technology, all play upon the process of teaching, suggesting, and in some cases demanding, changes in the practice of teaching, including such practices as team teaching, large and small group instruction, use of teaching assistants, etc.
2. Substantial differences exist in the nature and quality of teacher education in various colleges and universities as well as with respect to the quality of teachers produced.
3. Variations in the quality of teachers are key factors in the differences in nature and quality of educational programs found in towns and cities, and within given school districts.
4. While local and institutional autonomies and traditions properly should be respected, such freedom of initiative is intended to allow for variations in interests, emphases and standards of excellence, rather than for ranges that extend to include mediocrity.
5. The state has a responsibility to assure good education to all children of all backgrounds and abilities in all communities in Massachusetts.
6. To assure to each child quality educational opportunities, the state has the obligation to procure, prepare and permit to practice only teachers who are well and properly educated and professionally competent for their assignments.

7. A further obligation of the state is to help teachers to grow in knowledge and professional skill after they begin to teach.
8. Institutions that prepare, and schools that employ teachers, share with the state responsibility for maintaining standards that protect the educational rights of children. This is especially true of the student teaching intern experience and of the in-service development of teachers.
9. The state should seek to fulfill its leadership responsibilities to improve teacher education and legal obligations for teacher certification in such manner as to provide for resilient regulations; to encourage institutional and community initiative; to provide alternative ways of meeting standards; to assure competent administration of regulations with ample discretionary authority; and to avoid, to the extent possible, the creation of bureaucratic approaches and resources.
10. To achieve improvements in teacher education and certification policies and standards, closer state and institutional cooperation is desirable, which should include new and alternative approaches that allow for differences in preparing colleges and universities as well as in school systems.
11. The overriding measure of policies, standards and programs to prepare and certify teachers should be the impact on students in schools.

SCOPE AND FOCUS

Preliminary planning of the study is proceeding on the assumption that sound decisions necessarily will need to be based on knowledge of present practices. Since the present is ongoing rather than fixed any precise patterns, the possibility of using statistics covering the past five-year school-year period, 1961-62 to 1966-67, to define existing practices is envisioned. Examples of the kinds of information to be assembled are reflected in the following sample questions:

I. Source, Supply, Demand, and Quality of Teachers over five-year period.

1. Which institutions have prepared Massachusetts' teachers?
2. Has the supply been adequate to the demand? By levels and subject fields? In various specializations? For particular types of schools?
3. What has been the quality of the teachers employed in terms of such measures as intelligence, achievement, and creativity, rank in college class, College Board or Graduate Record scores?

4. How do teachers compare in intellectual ability and academic achievement with other college graduates?
5. How many teachers have failed to meet existing standards of qualification?
6. To what degree do variations in quality relate to specific sources of supply of employing school systems?
7. Which factors influence supply and quality of teachers: Professional image? Teachers' salaries? Professional working conditions? Certification standards? Opportunities for innovation? Geographic proximity? Political pressures? Etc.?
8. Have para-professional personnel been employed to assist teachers? Types? Numbers?

III. Nature and Extent of Preparation.

1. Which institutions prepare teachers in Massachusetts? How high is the priority given to this function in each? Do professors in academic fields as well as education take responsibility for policy, programs, and products of teacher education programs?
2. Which colleges and universities have teachers employed over the past five years attended?
3. What has been the extent and nature of the preparation obtained: By elementary and secondary teachers? In liberal arts, academic specialization and professional preparation? For specialized areas such as teaching the culturally disadvantaged or other types of handicapped children? Special fields? Counseling? Team teaching? New media? New curriculum programs?
4. What was the nature of clinical preparation provided? Are resources for such practice adequate? Equally available? Adequately supported? Permanently established? How should the state relate to student teaching and other clinical experiences?
5. How has competence to teach been determined?
6. Have teachers been prepared to deal with the cultural and psychological differences found in children?
7. Have elementary teachers completed a major in college?
8. Do secondary school teachers specialize or prepare to teach several subject fields?
9. Are teachers prepared to deal with the changing attitudes toward vocational education in elementary and secondary schools?

IV. In-service Education of Teachers

1. Are four years of college preparation sufficient to produce a fully qualified and competent teacher? Do beginning teachers need and receive help to adjust to their assignments?
2. Do teachers keep abreast of new knowledge and improvements in professional practice? Which policies and procedures protect against professional obsolescence?
3. Are assignments given to teachers in schools compatible with preparation and professional practice? Are the professional diagnoses and prescriptions for every child made by a fully qualified and professional teacher? Are teachers provided help to relieve them of the nonprofessional chores involved in providing educational services in schools?
4. Is certification related to continuing professional competence?
5. How do schools, teacher-preparing institutions, and professional groups cooperate with the State Department of Education to maintain maximum professional competence for teachers?

V. Definition of Standards

From a knowledge of present practices in teacher preparation and certification in Massachusetts, the study will assess strengths and weaknesses and identify promising trends. Criteria for evaluating practices and policies will come from recognized superior practices, locally and across the nation, as well as from the recommendations of consulting experts in teacher education and also from scholars in the liberal arts and subject fields. A subsequent step will be the definition of desirable standards to be applied in the future. The goal will be to project feasible and relevant as well as flexible benchmarks that that will assure strength for various approaches to teacher education and certification.

Standards for teacher preparation and licensing will be functional only if related to the characteristics of teachers that are desired. If necessary, then, the study will need to give attention to such personal,

intellectual, academic, and professional qualities that bear a relationship to effectiveness in teaching. An added consideration will be the types of professional service required by the state. Of concern, for example, will be the preparation of teachers for work with culturally disadvantaged children in the inner cities or with mentally and physically handicapped children. Standards, in short, must be related to the qualities required for teaching effectiveness in various types of professional assignments, rather than to uniform and traditional images of elementary and secondary school teachers.

In the definition of standards, a concern will be the promotion of cooperation among various interested groups and agencies, with each being encouraged to make appropriate and qualitative contributions in terms of individual traditions and commitments. Of importance will be the relationships between preparing institutions, local schools and the State Department of Public Instruction. Equally imperative will be identifying the roles of professional groups in establishing and maintaining high standards for teaching.

VI. Development of Models

An outcome of the study is expected to be the projection of possible models through which the agreed upon standards can be achieved. Institutions involved in the preparation of teachers, as well as school systems that provide clinical training and employment, will be encouraged to test various promising approaches. Ideas for innovation are expected to come from agencies and personnel already involved in experimental programs as well as from the staff and Study Committee.

A key objective of the model testing will be the extension of knowledge about teacher education and certification beyond its present state. The process is seen as an ongoing development with qualitative progress in teacher education being a continuing focus for research. Such an approach is expected to produce a validity base for teacher education and certification that permits results to be evaluated in terms of impact on students in schools.

CALENDAR SCHEDULE

CALENDAR OF CONFERENCES AND VISITATIONS

1. 5-19-67 Harvard University - Planning for Study - O'Neill, Chandler, Kiernan Representative Group of Education
2. 7-7-67 Study Committee Organized at Boston University
Discussion of Project
3. 9-7-67 Dr. John O'Neill, State Department of Education,
Dr. Harry Anderson, Dr. Phyllis L. Devine, Dr. Lindley Stiles - Boston University Discussion of Contract.
4. 9-8-67 Dr. Jack Childress - Contract
5. 9-28-67 Study Committee Meeting
6. 10-3-67 Mass. Research and Development
7. 10-5-67 Suffolk University
8. 10-6-67 State College at Boston and Boston University
9. 10-11-67 Boston College
10. 10-17-67 American International College and Springfield College
11. 10-18-67 Mount Holyoke College and Smith College
12. 10-19-67 State College at Westfield and State College at North Adams
13. 10-20-67 Lesley College and Tufts University
14. 10-26-67 State College at Lowell
15. 10-31-67 College of the Holy Cross and Clark University
16. 11-1-67 Northeastern University
17. 11-2-67 Study Committee Meeting and Harvard University
18. 11-3-67 Merrimack College and State College at Salem
19. 11-8-67 Emerson College, Wheelock College, and Simmons College
20. 11-9-67 State College at Bridgewater and Curry College
21. 11-10-67 Press Conference, Educational Development Center,
Chancellor of Board of Higher Education

(Calendar Continued)

22. 11-16-67 Regis College and State College at Framingham
23. 11-18-67 Advisory Conference
24. 11-20-67 Stonehill College, Wheaton College, and Eastern Nazarene College
25. 11-28-67 Assumption College and State College at Worcester
26. 12-6-67 Mount Alvernia College and Brandeis University
27. 12-7-67 Wellesley College and Gordon College
28. 12-9-67 Advisory Conference
29. 12-12-67 Mass. Research and Development and University of Mass.
30. 12-13-67 Division of State Colleges and State TEPS Committee
31. 12-14-67 Study Committee Meeting
32. 1-9-68 Governors' Conference
33. 1-30-68 Mr. Ralph O. West - Commission on Independent Schools
34. 2-1-68 Adult Education Study (MACE)
35. 2-3-68 Advisory Conference
36. 2-5-68 MACE MEETING
37. 2-6-68 School Councillors Association, Chairman - Board of Education and Study Committee Meeting
38. 3-14-68 Board of Higher Education, Commissioner of Education, Superintendents and Supervisors of Diocesan Schools in Massachusetts, Massachusetts Certification Bureau
39. 4-5-68 State College at Fitchburg
40. 4-11-68 Anna Maria College
41. 4-16-68 Emmanuel College
42. 4-17-68 Meet with Dr. O'Neill and Mr. Chandler
43. 4-23-68 Boston Conservatory of Music and Berklee School of Music

(Calendar Continued)

- 44. 4-24-68 Mass. College of Art and Cardinal Cushing College
- 45. 4-25-68 New England Conservatory of Music
- 46. 4-26-68 Berkshire Christian College
- 47. 4-29-68 Independent Schools Association and Early Childhood Education
- 48. 4-30-68 Mass. Conference Board, English for Foreign Born Groups, and Atlantic Union College
- 49. 5-2-68 Study Committee Meeting
- 50. 5-10-68 College of Our Lady of the Elms
- 51. 5-14-68 Mass. Research and Development
- 52. 5-29-68 MTA
- 53. 7-15-68 Report of Study to Advisory Council
- 54. 7-16-68 Press Conference

STUDY COMMITTEE MEETINGS

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

"STUDY OF TEACHER EDUCATION AND CERTIFICATION"

Report of the Study Committee Meeting
September 28, 1967

The Study Committee of the Massachusetts Advisory Council on Education met at the Fenway Commonwealth Motor Hotel at 12 noon.

In addition to the Staff of the Council and the Staff of the Study, those present were: Sister M. Agnello, Sister Ann Augusta, Mr. Philip Beals, Mr. Alton Cavicchi, Dr. Jack Childress, Mr. Joseph Durkin, Mr. Howard Hennigar, Mr. Ronald Fitzgerald, Dr. James Koerner, Mr. Jerome Landry, Mrs. Shirley Lewis, Dr. George Madaus, Dr. Gail Cosgrove, Dr. John O'Neill, Dr. David Purpel, Mrs. Charlotte Ryan, Mr. Michael Scarpitto, Miss Ruth Southwick, Dr. Robert I. Sperber, and Mr. William Wright.

Mr. John P. McGrail, Director of the Division of Teacher Certification and Placement of the Massachusetts Department of Education, spoke on "The Certification of Public Schools Professional Personnel."

Mr. McGrail stated that the best program for the certification of teachers cannot guarantee good teachers. Poor teachers must be screened out at the local level by attracting promising teachers and by selective recruitment. Teachers are hired by the local school committee and superintendent, not by certification or the school of education.

Massachusetts was the last state to adopt a certification law in 1951. Some legislative compromises and other factors have weakened the Massachusetts certification law. These are as follows:

- 1) Only public school teachers are certified.
- 2) Any school committee may be excused if they are unable to obtain certified personnel.
- 3) Certification does not include teachers serving in Massachusetts before 1951.
- 4) Certificates are rarely revoked.
- 5) The Department has little power of enforcement.
- 6) Not all professional personnel are included.
- 7) All certificates are permanent.
- 8) No reciprocity beyond the northeast
- 9) No experience is required.
- 10) No masters degree is required.

Mr. Edward Downey of the Massachusetts Teachers Association spoke on "The Role of Professional Organizations in Teacher Certification."

Mr. Downey stated that teachers must gain the control of entry into their profession. If government organization is unable to do it, then the responsibility is up to the teachers.

Several key points are listed as follows:

- 1) Teachers are alienated from the process; it is a university and political mandate.
- 2) Certification requirements are too minimal.
- 3) Colleges are training teachers but certification is a separate governmental function.
- 4) Children are hurt by the process through the hiring of uninformed and unskilled teachers.
- 5) Unqualified and uncertified substitute teachers are often given lengthy temporary assignments.
- 6) School committees evade the issue when they should be raising standards.
- 7) Teachers are often mal-assigned.
- 8) Salaries and public opinion have forced good potential teachers into other fields.
- 9) Penalties on finance should be levied upon systems hiring waived teachers.

Additional comments and questions were offered during the discussion period:

Mr. Hennigar - Perhaps there could be some type of reasonable temporary certificate to allow good people to become certified.

Mr. Downey - There is a fantastic number of inadequate school districts in Massachusetts.

Mr. Scarpitto - What has the teachers' organization done to police the profession?

Dr. Sperber - Examine the quality of pre-service education and on-the-job training.... Take a look at the quality of "teachers of teachers".

Dr. Cosgrove - Accrediting agencies are playing a vital role....

Dr. Gaige - A Harvard economist has pointed out the relationship of the cost of education to the quality of the student.

Mr. Durkin - Minimum certification laws must be enforced.... Mis-uses recur in the same type of community.

Mr. McGrail - For the most part, superintendents do ask for a waiver when it is needed.

Dr. Koerner - Teachers are almost always excluded from discussion on certification.

Mrs. Ryan - An important criterion, among others, is that teachers "like" the children they teach.

The next meeting of the Study Committee will be held on Thursday, November 2, at 12 noon at the George Sherman Union Building, Room 312, Boston University.

Phyllis L. Devine
Coordinator of Research

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION
"Study of Teacher Education and Certification"

Report of the Study Committee Meeting
November 2, 1967

The Study Committee of the Massachusetts Advisory Council on Education met at the George Sherman Union Building, Boston University, at 12 noon.

In addition to the Staff of the Council and the Staff of the Study, those present were: Sister M. Agnello, Sister Ann Augusta, Mr. Alton Cavicchi, Mr. Richard Clark, Dr. Jack Childress, Mrs. Shirley Lewis, Dr. George Madaus, Dr. David Purpel, Mrs. Charlotte Ryan, Miss Ruth Southwick, Dr. Robert Sperber, Dr. Joseph Palladino, and Dr. Robert Bond.

Dr. Robert Bond, Dean of the State College at Boston, presented his personal views as seen from his position as a dean of an urban state college. He spoke specifically on: 1) the weaknesses of teacher certification, 2) the role of the state colleges in teacher education, and 3) problems on teacher education.

The weaknesses in teacher certification are as noted:

1. Eighteen semester hours in an academic major are too minimal.
2. Lower level or core courses should not be considered a part of the major.
3. The emergency clause is inadequate.
4. Permanent certificates are automatically granted.
5. There is a need for a "beginning" certificate.

The role of the State Colleges in Massachusetts is in a process of change:

1. State Colleges are no longer State Teachers Colleges.
2. States Colleges now grant liberal arts degrees.
3. Direct control by the Board of Education has been replaced by a single Board of Trustees for all State Colleges.
4. Eventually all State Colleges will have individual Boards of Trustees.

In the area of teacher education, a greater emphasis must be placed on preparation to teach in urban schools. Teachers must develop specific skills and college faculties must be prepared to provide these skills.

There is a definite need for closer working cooperation between teacher training institutions and in-service training programs provided by school systems.

Dr. Robert Sperber, Chairman of the Committee on Teacher Education and Supervision of the Massachusetts Association of School Superintendents, presented his views on Teacher Preparation.

Communities should expect the following from teacher candidates:

1. The more effective teaching of communication skills
2. More depth in subject matter especially at the elementary level where specialization is increasingly critical.
3. Conversant with new materials in areas where public and parents are transferring responsibility to schools.
4. The dealing with critical social issues without indoctrinating.
5. The skilled handling of new technology and the making of wise decisions in future investments.
6. Emotional security and training to share teaching responsibilities with para-professionals and children.
7. Better preparation, knowing the latest research from learning theories, child growth and development, and psychology.
8. Better preparation through training and observation to take on new roles in school systems and to have a much broader picture of all parts of a school system operation.

Communities should expect the following from pre-service and graduate institutions:

1. Systematic well-conceived programs for preparing teachers for different roles.
2. Heavy reliance on training in "real" school systems with professors spending part of their training cycle teaching "real" schools.
3. Big doses of funds from the state to attract additional outstanding subject area professors to give state college students a general education equivalent to the best private colleges.
4. Involvement of operational people, master teachers and administrators, in working with pre-service people in structuring pre-service curriculum and experiences of future teachers.
5. Major overhauling of student teaching experience to include carefully selected master teachers serving as resident supervisors of colleges with adequate released time to do their job well.

Certification is a mechanism only. If it is too rigid, it should be modified; if it is too limited, it should be raised.

Phyllis L. Devine
Coordinator of Research

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION
"Study of Teacher Education and Certification"

Report of the Study Committee Meeting
December 14, 1967

The Study Committee of the Massachusetts Advisory Council on Education met at the George Sherman Union Building, Boston University, at 12 noon.

In addition to the Staff of the Council and the Staff on the Study, those present were: Sister M. Agnello, Dr. Dwight Allen, Sister Ann Augusta, Mr. Philip Beals, Mr. Alton Cavicchi, Mr. Douglas Chandler, Dr. Jack Childress, Mr. Joseph Durkin, Mr. Howard Hennigar, Dr. James Koerner, Dr. George Madaus, Mrs. Charlotte Ryan, Miss Ruth Southwick, Dr. Robert Sperber, Mr. William Wright, Mr. Albert Williamson, and Mr. Girard Hottleman.

Dr. James F. Baker, Assistant Commissioner of Education, presented a paper, "Another Look at Certification".

"During the 1965-66 school year, as reported to the Division of Research and Development, approximately eight per-cent of the Massachusetts teachers were not certified." "Non-certification occurs in certain secondary subject fields (foreign language, industrial arts) more frequently than in the general elementary area."

"Although not completed to date, evidence from the New England Educational Assessment Project indicates that a sizeable number, perhaps ten per cent, of the secondary school teachers do not have their primary teaching assignment in areas for which they are certified.

Dr. Baker recommended two levels of certification or endorsement. The first or Associate level would set minimal standards for entrance into the teaching profession. The second or Professional level would emphasize: 1) continuous professional growth, 2) continuing education, and 3) repeated evidence of excellence.

Acceptance into the Associate level would be based upon the possession of a bachelor's degree from an accredited institution and endorsement through one or more of the following: 1) academic, 2) internship, 3) experience, 4) peer evaluation, 5) professional examination, and 6) authority endorsement.

Entrance into the Professional level would require a minimum of three years experience. Further requirements would be selected from the following: 1) research and experimentation, 2) professional leadership 3) academic advancement, 4) pupil growth and achievement, 5) creativity in learning environment, and 6) community participation. A local, area, or state professional standards committee would issue and renew or withdraw Professional certificates.

Miss Elaine M. Hardie of the Massachusetts Foreign Language Advisory Committee and the Professional Preparation Committee of the Massachusetts Foreign Language Association, presented recommended guidelines for the preparation and certification of foreign language teachers. Miss Hardie stated that

present certification practices rely primarily on earned credit hours in a foreign language and do not guarantee proficiency in speaking, reading, etc.

The minimal suggested objectives for a teacher education program in modern foreign languages are as follows:

1. Ability to understand conversation at a normal tempo.
2. Ability to talk with a native with a command of vocabulary and syntax sufficient to express thought, in conversation at normal speed with reasonably good pronunciation.
3. Ability to read with immediate comprehension prose and verse of average difficulty and mature content.
4. Ability to write a simple "free composition" with clarity and correctness in vocabulary, idiom, and syntax.
5. An understanding of the differences between the sound systems, forms, and structures of the foreign language and of English and ability to apply this understanding to modern foreign language teaching.
6. An awareness of language as an essential element of culture and an understanding of the principal ways in which the foreign culture differs from our own.
7. Knowledge of the present-day objectives of modern foreign language teaching as communication, and an understanding of the methods and techniques for attaining these objectives.

Standardized tests have been developed in the above listed areas. It is suggested that foreign language teachers attain scores of "good" in the above area tests for certification.

THE NEXT MEETING OF THE STUDY COMMITTEE WILL BE HELD ON TUESDAY, FEBRUARY 6, AT 12 NOON. BOSTON UNIVERSITY GEORGE SHERMAN UNION BUILDING, ROOM 321.

PHYLLIS L. DEVINE

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

"Study of Teacher Education and Certification"

Report of the Study Committee Meeting
February 6, 1968

The Study Committee of the Massachusetts Advisory Council on Education met at the George Sherman Union Building, Boston University, at 12 noon.

In addition to the Staff of the Council and the Staff of the Study, those present were:

Sister M. Agnello
Dr. Dwight Allen
Sister Ann Augusta
Mr. Douglas Chandler
Dr. Jack Childress
Mr. Joseph Durkin
Mr. Howard Hennigar
Dr. James Koerner

Mr. Girard Hottleman
Dr. George Madaus
Father Patrick O'Neill
Mrs. Charlotte Ryan
Miss Ruth Southwick
Dr. Robert Sperber
Mr. Ralph West
Mr. Albert Williamson
Mr. William Wright

Dr. Lindley J. Stiles, Director of the Study, offered specific recommendations for the improvement of teacher certification and education in Massachusetts. His recommendations are as follows:

1. The abandonment of the present formula of transcript credit counting.
2. The creation of a "State Board of Teacher Education and Certification" with power to define and enforce modern, flexible standards.
3. The support of clinical training of teachers by the state.
4. The institution of experimentation by the State in partnership with schools and colleges linked with the State Board of Teacher Education and Certification.
5. The urging of adequate support for teacher education and certification.

Dr. Stiles offered clarification of the above:

1. The "State Bureau" should license and the "State Board" should certify.
2. The multiple roots of certification should be institutional approval, an option of certification by examination, and an option of professional attestation.

Reactions to the preceding recommendations were offered by members of the Study Committee. Representative summary statements are as follows:

Study Committee Meeting
February 6, 1968

Dr. Allen - The periodic review of certification should be tied into performance and knowledge increments.

Dr. Stiles - The question of salary is up to the local community ... learning or probationary license.

Dr. Gaige - Set up certification in such a way as to assure that differentiation is taken care of ... to include program approval of colleges and certain school systems.

Dr. Childress - Exercise of judgement in decision-making must be backed up legally and professionally.

Dr. Sperber - Certification must confront the environment of teachers, in the in-service situation. Periodic review is not consistent with the present state tenure law.

Dr. Madaus - Should decisions be left to "mixed group (task force)?"

Dr. Koerner - That is to be the purpose of the board.

Mr. Durkin - How specific is the certification law and how broad are the powers of the State Board of Education in formulating certification policy?

Dr. Gaige - It is necessary for the teachers organizations to play a key role in improvement Tenure should be consistent with requirements for certification.

Mr. Hennigar - What is the possibility of a category between provisional and professional teacher (associate)? ... possibility of dropping to "lower category" if professional education is not maintained.

Dr. Allen - Tenure should be at lower levels and of minimum standards. Senior categories should not be tenured ... subject to periodic review.

Mr. Durkin - Certification should remain minimal.

Dr. Koerner - The report should contain broad basic recommendations. Do not tie the hands of the proposed board.

Dr. Allen - A possible name for the board might be the "Credentials Commission."

Mr. Chandler - Teacher education is the responsibility of the Board of Higher Education. The present bureau is ineffective because of existing law and limitation of staff.

Dr. Sperber - What is going into quality? Too much emphasis on procedure.

Dr. Allen - The "board" needs to be created for permanence if it is to have authority ... performance criteria.

Study Committee Meeting
February 6, 1968

Dr. Stiles - The board, consisting of teachers, professors, etc. should have the power to make decisions.

Mr. Chandler - State task force evaluates school programs.

Dr. Koerner - Program approval should not be stressed in the report.

Mr. Durkin - Need for revision within the existing system - no need for legislative change ... attack on tenure

Miss Southwick - There is a need for more involvement of classroom teachers.

Dr. Madaus - The "board" could be making critical decisions above the Board of Education.

Dr. Stiles - The "board" would be appointed by the Board of Education.

Dr. Allen - The binding in of performance criteria - "commission" must be created with charter outlining its role

AT THE TIME OF MAILING, FUTURE MEETING DATES HAVE NOT BEEN DETERMINED.

Phyllis L. Devine

Coordinator of Research

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

"Study of Teacher Education and Certification"
Report of the Study Committee
May 2, 1968

The Study Committee of the Massachusetts Advisory Council on Education met at the George Sherman Union Building, Boston University, at 12 noon.

In addition to the Staff of the Council and the Staff of the Study, those present were:

Sister Ann Augusta	Dr. David Purpel
Mr. Philip Beals	Mrs. Charlotte Ryan
Mr. Alton Cavicchi	Senator William Saltonstall
Mr. Douglas Chandler	Miss Ruth Southwick
Mr. Richard Clark	Dr. Robert Sperber
Mr. Joseph Durkin	Mr. Ralph West
Mr. Howard Hennigar	Mr. William Wright
Dr. Justin McCarthy	Mr. Albert Williamson
Dr. John O'Neill	

Dr. William C. Gaige, Director of Research of M.A.C.E., who presided, announced that this was the last formal meeting of the group. Hopefully, Dr. Stiles will present the final report of the study to the Advisory Council on July 1, 1968. This will be a public meeting to which all the committee members will be invited.

Dr. Gaige pointed out that he had read the four chapters submitted by Dr. Stiles. To put into effect what Dr. Stiles advises appears to require a small, high-level, well paid staff. A constantly renewing system would bring in the remainder of the commission from the colleges. The commission would be placed under the Department of Education. It is not expected that the Commission will be perfect. Conceivably it will take 2 or 3 years to get a working organization.

Dr. Stiles: "Let's look at the big issues but not overlook little suggestions." Basically there are four recommendations.

1. Base certification of teachers on judged knowledge and performance rather than accumulation of credits.
2. Call upon the profession to take key responsibility for establishing criteria for certification. Professionals will be chosen within various fields.
3. Establish a mechanism at the state level to bring about and keep going this involvement and this new process.
4. The state will help to improve clinical practice and experimental programs.

Recommend that certification board do the certifying and the state do the licensing.

Question: Should the commission for certification be linked to the State Board of Education or to the Board of Higher Education? Obviously it concerns both.

Pertinent points made during the discussion follow:

Mr. Chandler: It ought to go where it works best.

Alternatives:

1. In the State Board of Education with an associate commission
2. In the Board of Higher Education
3. Joint group to which commission is responsible

Mr. Chandler: We need to be careful about forming another super board. Do not set up a quasi-independent board. Reorganize and use the existing machinery.

Mr. Durkin: Already an attempt has been made in the state to unify responsibility. Why not link the new commission to the Advisory Council? Then all information which they have can be used.

Mr. Wright: The Bureau of Certification has authority for licensing; it only needs a change of status.

Mr. Chandler: We have all of that authority already.

Mrs. Ryan: I am concerned that whenever there is a new task needed to be done, there is always a call for new structure. Couldn't proper structure be made out of the existing bureaus to do what Dr. Stiles suggests?

Dr. McCarthy: Forget the realistic aspect of the budget for now. Money will be forthcoming. The Bureau of Certification could handle it, but more than restructuring is needed. I would not want to see certification standards so closely linked to colleges or to the Board of Higher Education.

Dr. Stiles: The Executive Commissioner should get \$20,000. If the commission is put into the existing department, cooperation from non-public organizations is closed out.

It would be necessary also to work with old staff who find it difficult to imagine this different kind of organization. We need to make sure this new organization is given a chance to work in a new way.

Dr. Gaige: Creation of the commission will be by law. We'll have to leave the authority with the Board of Education or the Board of Higher Education.

Dr. Stiles: Putting the commission with the Board of Higher Education is a minority view. The executive officer of the new commission should report directly to the Commissioner of Education! This rejects making it part of another department.

Mr. Chandler: The Bureau of Certification is inefficient now but, if given advantages, could be efficient. I cannot conceive that independent schools would ever really fear being dominated. The concept Dr. Stiles has is tremendous; we're ripe for it but it should be carried out within the

existing organization...and would be done much more easily and readily.

Mr. Williamson: Existing organization will not utilize professionals in the field. We should distinguish between licensing, bookkeeping and setting up standards.

Miss Southwick: How can we be sure the job will get done if the existing structure is used?

Mr. West: Independent schools have very little contact with the state on certification. I'm interested because this seemed like a fresh approach to the problem. If certification is left within the existing organization, a lot of people will say it's the same old group. This new approach is a way to give teacher certification an entirely new look.

Mr. Beals: If new board is independent there will be a new look.

Dr. Purpel: I favor keeping it in the State Department but separate licensing clerks from policy-making people.

Dr. Stiles: It should be still within the State Department but outside of Personnel and Placement. It should be its own department.

Dr. McCarthy: We must concern ourselves with what is best, not with dollars. If it is a good plan it will go.

Mrs. Ryan: If it's a good thing, the legislature will buy it.

Mr. Durkin: Should the new commission have mandatory or advisory powers? etc.- If advisory, it should go under the Advisory Council. Involvement of the legislature will result in a loss of some control.

Dr. Gaige: The Advisory Council is to study. The present law would not allow what Mr. Durkin says. The new commission must be under the Board of Education or the Board of Higher Education. To set up the commission legally brings in higher education people and creates unity. It would not have final authority. An assistant commissioner would be working in a Cabinet or Department.

RENEWAL OF LICENSING:

Dr. Sperber: I am in favor of renewal (by local or by commission). I favor state renewal so that the matter is taken out of local hands. It might create a crisis in local committees and they might have to raise the quality of education. Some apparatus should be set up for licensing and certifying para-professionals so they have instructional status and are not under Civil Service.

Dr. O'Neill: Quality control must be done at the state level.

Mr. Hennigar: There should be no certifying of para-professionals. Differentiation in jobs should be done at the local level.

Dr. Sperber: Qualify para-professionals. Change the law to give them licensing sans certification and not make schools liable.

Miss Southwick: Make it well known to teachers that there is a way of appeal for teachers who might not be renewed. This will get support of teachers.

Senator Saltonstall: Start at the other end - pupil teacher, and then the place where the work is to be done will decide itself. We can sell the plan more readily if we start with the student and the teacher. Teachers are very effective with the legislature.

Dr. Stiles: In the present system, qualifications are determined by counting credits.

Mr. Clark: I am interested in performance. Thirty hours might be thirty bad hours. The new system is based on performance.

Dr. Purpel: Credit means getting a grade on a test; the only new idea is a new test.

Dr. Stiles: We are proposing knowledge and performance tests.

Dr. McCarthy: I would like it stated that in some institutions the liberal arts faculty has some effect on teacher preparation policy.

Mr. Williamson: It is difficult to sell to teacher organizations unless they can be told who will test and what the results will be.

Dr. Gaige: Set-up the process which involves professional groups permanently.

Meeting adjourned 2:45 P.M.

Phyllis L. Devine

Coordinator of Research

CONFERENCE PROGRAMS AND GROUP REPORTS

PROGRAMS AND PARTICIPANTS FOR THE THREE ADVISORY CONFERENCES
ON TEACHER EDUCATION AND CERTIFICATION IN MASSACHUSETTS

November 18, 1967

TEACHERS FOR MASSACHUSETTS-1980

Registration-Coffee 9:30-10:00

Dr. William C. Gaige, Presiding

Executive Director

Advisory Council on Education

10:15 GREETINGS

Jack R. Childress, Dean
Boston University School of Education

10:30 TEACHERS FOR A COMPLEX AND COMPRESSED SOCIETY

Frederick H. Jackson, President
Clark University

11:15 REACTORS:

Gene D. Phillips, Chairman
Foundations of Education Department
Boston University

Demetrius S. Iatrides, Director
Institute of Human Sciences
Boston College

11:45 - 1:00 LUNCH

1:15 TEACHERS AND EDUCATIONAL TECHNOLOGY

Gabriel Ofiesh, Director
Center for Educational Technology
Catholic University of America

2:00 REACTORS:

Donald W. Meals, Director
Educational Systems and Applications
Raytheon

James Gilbert, Director
Office Educational Resources
Northeastern University

2:30 GROUP DISCUSSIONS - leaders included Dr. Lester Goodridge, Elizabeth Ray, John Washburn, Winifred Mahony, Richard Hersh, Frederick Pula, Elaine Hooper, Dr. Robert Sperber, Joseph Mahony, and Dr. William Fitzpatrick. Analysts were Dr. Martha John, George Hathaway, Raymond Angers, Sister M. Agnello, Lauriston Ward, Jr., Patricia Master, Sister Ann Augusta, Dr. James Hengoe, Ruth Southwick and Janice Ingham.

December 9, 1967

THE REFORM OF TEACHER EDUCATION

Registration-Coffee 9:30-10:00

Dr. Lawrence E. Fox, Presiding

Senior Research Associate

Advisory Council on Education

10:15 GREETINGS

Jack R. Childress, Dean
Boston University School of Education

10:30 THE ACADEMIC COMMUNITY'S RESPONSIBILITY FOR TEACHER EDUCATION

Jerrold Zacharias, Professor
Massachusetts Institute of Technology

11:15 REACTORS:

Harlan D. Philippi, Associate Dean
Director of Graduate Studies
Boston University School of Education

Stephen J. Clarke, Chairman
Department of Education
Regis College

11:45 - 1:00 LUNCH

1:15 STUDENT TEACHING - INTERNSHIP

David Purpel, Director
Programs in Teaching
Harvard Graduate School of Education

2:00 REACTORS:

Gilbert M. Wilson, Chairman
Curriculum and Instruction
Boston University School of Education

Robert I. Sperber, Superintendent
Public Schools
Brookline

2:30 GROUP DISCUSSIONS - leaders included Dr. Phillip Fitch, Dr. George L. Miller, Dr. Robert Foy, Dr. Alice Crossley, Dr. Stanley Clement, Mr. Alton Cavicchi, Dr. Leila Sussman, Dr. William Mahoney, Dr. Ernest Blaustein, and Dr. Lowell V. Coulter. Analysts were Dr. Richard Chambers, Dr. Phyllis M. Henry, Mr. Robert Frevermuth, Mr. David Porter, Dr. Robert Todd, Mr. Frank Zervas, Dr. Arthur Miller, Dr. Thomas Devine, Mrs. Charlotte Ryan and Mr. William Hoyt.

February 3, 1968

CERTIFICATION OF TEACHERS

Registration-Coffee 9:30-10:00

Dr. Lindley J. Stiles, Presiding

Professor, Northwestern University

Director of Study

10:15 GREETINGS

Jack R. Childress, Dean
School of Education
Boston University

10:30 CERTIFICATION STANDARDS WITH RESILIENCE

Alvin P. Lierheimer, Director
Teacher Education and Certification
New York State Department of Education

11:15 REACTORS:

Donald T. Donley, Dean
School of Education
Boston College

John F. Bowler, Registrar
Framingham State College

11:45 - 1:00 LUNCH

1:00 THE PROFESSION'S RESPONSIBILITY FOR TEACHER EDUCATION
AND CERTIFICATION

Roy Eidelfelt, Associate Director
Teacher Education and Professional Standards
National Education Association

1:45 IDEAS FROM OTHER COUNTRIES

James D. Koerner, Education Writer

2:30 DISCUSSION AND REACTION

Lindley J. Stiles, Moderator

3:30 ADJOURNMENT

SELECTED GROUP REPORTS AND REACTIONS FROM
THE NOVEMBER 18, 1967 CONFERENCE

REPORT I

1. Salary schedules are wrong about seniority. We reward good teachers, but what about the laggards?
2. New concept? Pay hourly rate. Work like doctors, interns (pay) - then teachers.
3. Certification - some states have temporary certification.
4. The personality and attitudes of teachers hurts education.
5. Screening of candidates as prospective teachers is needed.
6. Teachers do not have an inquiring approach.
7. We need all kinds of people for teaching.
8. Schools of Education need more courage.
9. Schools do have and use a great deal of technology.
10. Teachers are not learning enough about literature and the arts.
11. Need new methods for transferring of knowledge.
12. Boston University's new preparation program should be explored.
13. There is a need for a different make-up of the Study Committee.
14. Teachers' powers have not been usurped.
15. Do teachers need to be certified?
16. Not certification, but better college preparation needed.
17. Should not allow just anyone to prepare teachers.
18. Change teacher (title) to Supervisor of Education and take away managerial tasks.
19. Need more aides in schools.

20. Something must be done to force towns to hire "qualified teachers" in all areas.
21. Is student teaching always valuable?
22. Use video tapes to prepare teachers.
23. Allow fellow teachers to hire and to work with new teachers.
24. State Teachers Associations should set-up standards.
25. Not much evidence of successful student teaching.

NOTE: Dr. Phillips recommends, "We create as many viable certification models as ways to prepare teachers. These should be different for different area preparation."

REPORT II

Ten persons were present. Among the group were represented a dean, superintendent, professor of chemistry, principal and a graduate student.

Current feelings indicated that the present standards of certification were inadequate.

GENERAL FEELINGS

An earlier concern of content and transfer was discussed. There were some responses questioning the speeches. What industry really has proposed as a need was turned "thumbs-down" by the speaker of industry. Industry has felt there was no provision for content now they want to omit or ignore it.

Industry has been looking for a flexible person.

SIGNIFICANT TO CERTIFICATION

1. A militant regimented system (regents) needs be avoided.
2. State Level Certification questioned.
3. Certification at the College-University level more realistic. Institution knows student better than state officials (too far removed).
4. Student teaching important.
5. Student teaching grades from institutions need be more realistic.
6. Academic marks of individual not most important criterion.
7. Individual needs be well-rounded.
8. Sensitivity training necessary (can deal with people). Individual needs to be able to relate to students.
9. Good intelligence worthwhile, not sole criterion.
10. Content and methods for transfer (needs to be determined) into classroom seems important.

REPORT III

One of the greatest problems of schools of education is related to the types of courses which are offered. We need a certain number of credits but in what did we earn them?

1. Student teaching is the most important part of teacher training. Two semester hours for certification is ridiculous.
2. Observation prior to student teaching is essential. Cannot plunge student into the situation without it.
3. Guidance must be given to the student concerning level of teaching. The student is not always aware of the situation and does not always know herself. Some are really not cut out to be teachers.
4. Evaluation of student teacher - not one person, but consensus of all involved.

CONCERNING LEVEL OF TEACHING

1. College and school system must work much more closely.
2. Need for more supervisors of teachers.
3. Better liaison.

Public schools have done a tremendous job in training our teachers.

1. Screening teachers.
 - a. Should be some way of identifying at the high school level.
 - b. Minnesota - Teacher - Attitudes Inventory - one of the best instruments. Found a negative correlation between testing prior to student teaching and following.
 - c. Students in some institutions are screened by observation on the part of the professors.

HOW CAN WE SCREEN THESE OUT?

1. Teacher who is a talker, but is not a teacher.
2. Person who has obvious personality problems and works it out on the pupils.
3. Person who cannot see the woods for the trees.

What is the school system's role?

What is the college's role?

1. School administrator has a responsibility to point out deficiencies.
2. Parents and others resent their children having a beginning teacher.
3. Could there be some way of a one-year internship?
4. Must be a close liaison between academic department and department of education.
5. Both evaluate and this information is pooled with what we know about his personality, etc.
6. How are we preparing teachers for the future? The student teaching experience is for the present.
7. Perhaps better liberal arts background is the answer. We are preparing them here to think. This is basic.
8. The School Committee must demand from teacher education just this type of teacher.
9. A fifth year seems to be the answer. It seems to be a unanimous opinion that this is an essential MAT Program. (This brought on a heated discussion!)

REPORT IV

1. While deciding upon certification requirements for new teachers, we should also be considering a component in-service training program. Question of need for tenure -- suggested ways to give more in-service.
 - a. Use of liberal sabbatical for study.
 - b. Use of newer teacher as innovator.
2. The question of the role of the liberal arts college in teacher training was raised.
 - a. The possibility of an apprentice program for AB people was suggested.
 - b. A loosening of student teaching requirement depending upon the individual student.
 - c. Suggestion of stronger alliances between universities and the master teacher-trainer.
3. The need for more personnel at every level was noted.
 - a. Possible use of community specialists.
4. Several persons felt that negative remarks stirred up frustrations that led to inactivity rather than drive to accomplish more.
5. Possible new patterns of training for college level were suggested.
 - a. Use of some afternoons per week for methods during their 16 weeks of practice teaching.
 - b. Use of limited practice teaching and an apprentice year (a 5th one before certification).

SELECTED GROUP REPORTS AND REACTIONS FROM
THE DECEMBER 9, 1967 CONFERENCE

REPORT I

There is little doubt that the eight members of Group X benefited from the variety of viewpoints expressed during the discussion. However, since my purpose in this report is to present those viewpoints which relate constructively to the broader purposes of the study, I will be selective and brief. Those viewpoints which I consider significant may be listed under two general headings: Observations concerning present teacher training and certification procedures and recommendations for the consideration of the study group.

OBSERVATIONS

1. That communication between those responsible for teacher training programs and those who cooperate in public and private schools is neither continual or two-way.
2. That, in spite of the general excellence of some practice teacher programs, many differ widely in procedures and results, e.g., length of time in cooperating schools, degree of responsibility given practice teachers, method and amount of supervision, and the experience and role of the cooperating teachers.
3. That certification procedures do not provide for teacher involvement (or teacher organization involvement) so that the members of the profession might work to improve the quality of those entering their ranks and, indeed, the image of teachers in the state.

RECOMMENDATIONS

1. That, in keeping with the suggestions of Dr. Zacharias and Dr. Purpel, students who are potential teachers be exposed to children in learning situations much earlier in their college careers. Local public and private schools and summer schools would be asked to cooperate and, in this way, students in teacher training programs would work with small groups of children in preparation for the later structured practice teaching experience.

2. That state funds be provided for the staffing and organization of an agency or "clearing house" with the following objectives:
 - A. To help colleges and universities place practice teachers in local schools with the hope of developing more flexibility according to the type of experience desired.
 - B. To provide seminars for cooperating teachers to improve the actual practice teaching experience by daily help and supervision. In this way the cooperating teacher would understand his or her role and could, in turn, make suggestions to the university people in charge of the programs.
 - C. To arrange seminars by professors in the various academic areas as a resource for public and private school administrators and teachers who have special curriculum problems or who wish to be aware of current thinking and developments in their fields.

REPORT II

The following comments represent the observations and/or questions raised by the participants in the group. The members of this group represented persons with the following types of backgrounds: education writer, college personnel, MTA-NEA, MFT (AFL), school committee.

1. The most frequently mentioned observation and, in the opinion of the group, the most critical item was the lack of representation of teachers on the Advisory Council and the importance of involving teachers in matters relating to certification.
2. Teachers must have the opportunity to "police their own"...a point on which MFT and MTA representatives were in agreement.
3. Presently a "monolithic system" -- must change by giving school committees, teachers, professional educators and academic scholars a "voice" in matters relating to certification.
4. More concern expressed about the "mechanism" by which certification standards evolve than in just what these standards should include. Feeling was that it would be possible to suggest minimums without too much difficulty .
5. Attention MUST be given to recent legislation relating to "Specific Language Disability" law and the formulation of certification standards for teachers of these children. NOT to be administered by Bureau of Special Education but by larger Department of Education.
6. Felt that consideration must - somehow - be given to COMPETENCE of teachers in devising certification standards.
7. Might create "probationary year" without complete certification for "new" (not necessarily first year) teachers to Massachusetts. Performance to be evaluated during teaching and then application made for certification.
8. Serious considerations should be given to allow teacher-training institutions to make decisions relative to certification. Such programs would be approved by State and State would accept testimony to the effect that person is qualified and, in fact, certified.

NOTE: Realize that such a system would result in a variety of ways in which a person would be prepared for certification but feeling was that, in fact, this was already in effect but lacked the authority of sponsoring institution to certify.

REPORT III

GROUP DISCUSSION

1. Certification requirements and revisions must avoid narrow corrections and gear themselves more to the larger problems as suggested by Dr. Purpel.
2. Massachusetts certification requirements are among the loosest. We need to think in terms of closing loopholes, not in opening loopholes as suggested by Dr. Zacharias.
3. Certification can be an effective method of "weeding out" poor teaching prospects. However, in many cases a prospective teacher need only go to a neighboring state, teach for a short time, and then return to his home state fully certified.
4. More specific certification levels are needed to insure quality teaching i.e., kindergarten-primary, upper elementary, junior high science, senior high mathematics, etc., etc. Special emphasis should be given to training and certifying teachers of 3-6 year-olds.
5. Even though "loopholes" in certification should be tightened some mechanism should be established so that peace corps types, etc., should be assimilated into public school teaching with the minimum of difficulty.
6. Public education must be made so inviting that successful people in other fields of endeavor will be attracted toward and encouraged to make teaching a career.
7. Judgment by peers is a mark of a professional group. Education should do more of this. Tenure can be more judiciously used to "weed out" sub-par teachers. A more effective rating instrument than the objective tenure device might well be the increased use of honest self-appraisal and re-direction on the part of individual teachers.

POSITION PAPERS

TEACHERS FOR MASSACHUSETTS - 1980

by: Dr. Frederick H. Jackson, Clark University, Worcester, Mass.

Mr. Chairman, ladies and gentlemen. I am very pleased to be with you and to participate in this conference on Teachers for Massachusetts - 1980. As I was thinking of what I might say this morning, I found myself smiling at the many wrong prophecies of the future which as a one-time historian I am familiar with. The crystal ball, even in the hands of the most skilled practitioner, is apt to get rather cloudy. 1980 is thirteen years from now, and I suppose one way of approaching the question of what things will be like in 1980 is to look back thirteen years in the past. That would bring us to 1954. As I recall it, things were not terribly different in 1954 from what they are in 1967. As a matter of fact if you ask me how the United States differs in 1967 from what it was in 1954 I would be rather hard pressed to answer you. It has certainly grown, it has become even more complex, the economy has become more and more abundant and more and more service-industry oriented and education has probably expanded, if not improved, more than in any comparable period of time.

Thus my first observation about 1980 is that it will be much the same as it is today. I am assuming, of course, that the period ahead will be one of relative peace. The educational problems of 1967 will still be with us in 1980, some of them intensified. The proportion of the population living in urban settings will continue to grow. The proportion living in rural areas will continue to decline. The total population will continue its upward surge, and crowdedness will be an ever present characteristic of the society in 1980. More and more people will be occupying less and less land

as our growing population increasingly lives in urban areas. The complexity of a highly technologically oriented society living in huge urban - suburban conurbations will continue to increase. Several metropolitan regions will rival the New York area in population and complexity. (I almost said perplexity!)

The cities then will be very much with us in 1980. And I strongly suspect that the problems of the cities which we know today will also be with us thirteen years hence. Great progress will have been made by 1980 in conquering problems of slum living, but this will be a problem which will not have been solved by that date. Further progress will have been made in the integration of Negro Americans into the mainstream of the country's life, but again much will remain to be done. Hours of labor will in all probability have decreased and the society will be even more a leisure oriented society than it is today. There won't be a mountain left to the north of us which won't have its ski trails, and swimming pools, pleasure boating and other sports will abound. Further inroads will have been made by 1980 in poverty and the percentage of families and individuals living on incomes below an acceptable minimum level will have continued to decrease.

What I have been doing, of course, is extrapolating trends of the post-war period. Barring a major war or economic disaster, I think there is little doubt that most of the trends I have outlined will continue as in the past.

Turning now to education in 1980, what will it be like? The first thing to be said, I think, is that it will be more the same as it was in 1967 than it will be different from it. Education is a very conservative institution. It has been described by some as the last of the handicraft fields. It has

been the least changed by improved technology of any major area of American life. I suppose that the biggest change in American public education which has occurred since the second world war has been the toughening of it, and this, we must remind ourselves, came more because of an external pressure, the launching of sputnik by the Russians a decade ago, than by anything which happened in the United States. Toughening of education, making it more rigorous was our answer to the Russians' achievement. There is no evidence that I know of that international rivalry will lessen in the next decade or two. On the contrary, it is likely to become even more intense. The pressure for more rigorously trained young men and women to compete with the Russians and the Chinese in the highly technological games the great nations play will go on.

The ever increasing emphasis on the city and its problems will create pressures and make demands upon education equal to and perhaps greater than international pressures. Somehow the young people who grow up in the slums of our cities must be educated better than we are educating them today. I can't tell you how to do it, but I can tell you that it is not being done very well today. Fortunately, better sociologists and psychologists and more of them are turning their attention to some of these problems and some promising new developments are being experimented with. An article in a recent issue of the New York Times Magazine began as follows: "Five or ten years from now, when the kids who have been through Head Start are found still at the bottom of the academic heap, the racists and know-nothings will have a field day," warned a young psychologist, adding bitterly: "The only methods that work with these children are just not being used." The article goes on, "His despair is shared this fall by thousands of teachers and

administrators as they realize that the new generation of slum children who entered school this year is just as unfamiliar with letters and numbers, just as vague about the structure of the English language, as that which came before it.

The children of poverty know far less than middle class children when they enter the first grade. Since they also learn less from class, they fall farther behind with every year in school - which injures them emotionally as well as academically. Eventually many of them stop trying, drop out and join the vast pool of functional illiterates who cannot find jobs. The article goes on to say that Head Start Programs are modeled on conventional middle class nursery schools. Middle class nursery schools operate on the theory that they can directly influence only the child's emotional and social growth, not his mental growth. They assume that if they build up a shy child's confidence or re-direct an angry one's aggression the child's intellectual development will take care of itself following a sort of built-in timetable. Therefore, they concentrate on teaching children to "get along with others" and "adjust to the group". The article further goes on to describe some experiments in which a few Head Start programs are teaching intellectual matters to three and four year olds. One such program has been taking place in Canton, Ohio. Here is a description of it. A brisk two hour schedule allows virtually no time for free play. Instead of having a central motherly teacher for the whole class, the children are split into small groups that move from subject to subject each with a different instructor. Instead of spending most of their time on non-verbal activities which hardly change from semester to semester, the children and teachers talk, shout, chant in full sentences following a very specific plan. The children spend about twenty minutes a day on language, twenty minutes a day on math and twenty minutes a day on

reading. These drills take up half of the two hour program; the rest consists of juice and cookies, drawing, singing and outdoor activities. In the opinion of the director of the program, the children's single biggest achievement is that they learn to speak in sentences and can thus unpack meaning from statements. Though they could use language to get along socially before they started, he says, they could not use it to express ideas. These classes do wonders for the children's self image because the children know they are really succeeding at something that appears very tough. The first group of children in the program had been picked because their older brothers or sisters could barely keep up with the lowest track in their neighborhood's nearly all Negro elementary schools or had repeatedly failed in school. After two years of training these extremely disadvantaged five year olds scored at mid-second grade level in arithmetic and mid-first grade level in reading and spelling on a widely used achievement test. Several were far too advanced for even the top track in their neighborhood schools. Instead they broke the color line in a white school where they are performing as well as children whose parents have university degrees.

I have perhaps devoted too much time to this example, and this new approach may not prove to be a panacea for dealing with underprivileged youngsters from slums of large cities, but at least it is a new approach to a problem which has proved to be most intractable and for which new approaches and new solutions are desperately needed. So, let us hope that by 1980 new methods, new procedures will have been developed which will enable education to cope with what is probably its greatest problem: somehow bringing the disadvantaged youngsters of slum areas into the mainstream of American culture. I suspect that it will never be done perfectly, but I have every confidence that it can be done vastly better than we are doing it today, and I would submit to you,

ladies and gentlemen, that nothing is more important to the future of our country than making progress in this area.

There are no panaceas in education. I worked at a foundation - one of the best - for nine years, a foundation that got as many or more of the good ideas in education than any other in the country. Yet I never ceased to marvel at the lack of originality or relevance to central problems which most of the proposals which came before us contained. There has never been a greater need for new approaches to education than there is today.

I indicated earlier in my talk that the application of technology to education has been minimal. It is true, of course, that such visual aids as film strips, films, the use of overhead projectors have been staples of the American public school for a good many years. In the early days of the audio-visual movement there were brave statements made about how these new tools would revolutionize education. The truth, I am afraid, is that these aids have simply changed it a little. I don't think anyone would say that it has revolutionized it.

Since the second world war there have been two other major technological developments which have educational applications. The first of these is television. When I was at the Carnegie Corporation from the mid 50's to the mid 60's some of the officers of the Ford Foundation were convinced that television was, if not a panacea, something very close to it. They spent many millions of dollars trying to demonstrate this fact to the educational community and to the American populace. I suppose the most intensive effort to teach by television was the Hagerstown, Maryland experiment. The schools of this community were linked by television cables and a substantial proportion of all the teaching in the system was done by means of television. After a while the men at the

Ford Foundation who were most interested in this program retired or left and gradually the support for educational television declined. The Hagerstown program is, I understand, being continued but not on the scale it previously was. More significant, the Hagerstown experiment has not spread the way it was hoped that it would to other communities. There are still vastly more schools without television instruction than there are with them and there appears to be no great hurry on the part of anyone to "get with" instruction by television. The studies of its effectiveness have not done anything to increase this trend, for the studies have indicated that instruction by television appears on the whole to do the job no better than in the classroom and in some cases it appears to do it less well.

Perhaps we have expected too much too soon. I am inclined to think that this is the case. In 1980 I suspect that a larger proportion of instruction will be by television but I strongly suspect that most instruction in 1980 will still be by the individual teacher to an individual group of students.

The other major technological development has been programmed instruction and the teaching machine. This has been with us for nearly a decade and like television it has made relatively little inroads into the public education system as a whole. Like television it was hailed by its earliest promoters as a panacea. Some of the large corporations have been so impressed by the possibilities of somehow harnessing programmed instruction to computers and somehow introducing computerized programmed instruction to the schools that they are investing millions and millions of dollars in both hardware and software. Thus far, they seem to have done much better with the hardware than the software. As any visitor to a major educational convention is soon aware the range of teaching machines, from relatively simple inexpensive hand

manipulated boxes to very costly, complex electronic devices, is tremendous. I have the strong impression, however, that the programs which go into these machines - and they of course are more important than the machines themselves - are not nearly so highly developed. Part of the problem has been that some of the publishing firms have tried to move too rapidly and have rushed on to the market with programmed texts and programs for machines which leave much to be desired. This is a field in which I have had some personal experience because the Carnegie Corporation supported the efforts of Professor B. F. Skinner of Harvard and some of the earlier experimenters in the programmed instruction - teaching machine field. The impact of these devices on most public schools to date has not been great. As with television perhaps I have been expecting too much too soon. With the millions of research and development capital being poured into the "knowledge industry" by such technologically advanced organizations as IBM, Xerox Corporation, Time-Life, General Electric and a host of others, a great many things could happen between now and 1980. As with television I suspect that teaching machines will play a greater roll in 1980 than they do today, but I repeat what I said earlier that I strongly suspect that most teaching thirteen years down the road will be done approximately as it is being done today.

Am I not being a bit too pessimistic, you may ask? I somehow do not think that I am. I will be the first to admit that the crystal ball has often been less than perfectly clear, but I think that history is on my side.

FHJ/mw

TEACHERS AND EDUCATIONAL TECHNOLOGY: A CONFRONTATION*

Dr. Gabriel D. Ofiesh, Director
Professor of Education
Center for Educational Technology
The Catholic University of America

SOME PROGNOSTICATIONS WITH EDUCATIONAL IMPLICATIONS

What will life be like in twenty years? Prognosticators say that today's population of 196 million will swell to 240 million by 1980 and then perhaps to 300 million by 2000. Life will be far more urbanized than it is today, for while central cities may not grow, the suburban rings around them will certainly grow; the rings will expand outward and touch the swelling rings of other cities.

In 1790 five percent of the people lived in urban places and they were all small. In 1950, 64 percent of the population had become urban. This percentage grew to 70 percent by 1960, and predictions indicate that between 75 and 80 percent of the population will be urbanized by 1980. By that time only 10 million of the entire 240 million will be engaged in production of food and the farms will become business enterprises of a corporate nature rather than the property of individual farmers. The entire population will have become even more mobile than it is now, both for business and pleasure.

Technological sophistication of production processes and the use of technology in all kinds of social applications is scheduled for a big increase.

* These are working notes for remarks to be made to The Advisory Conference, Advisory Council on Education, The Commonwealth of Massachusetts, Boston University Law School Auditorium, November 18, 1967, and are not to be quoted without permission of the author. Permission granted July 16, 1968.

The supply of information will continue to expand exponentially. The demand for information will increase at a similar rate. Therefore, the need for communication, communications systems, communications devices, and the amount of time spent in engaging in communication will increase enormously on the part of the entire population. Organizations, government and otherwise, will grow in number and complexity. A special area of growth is the interlocking relationship of inter-agency agencies, inter-government cooperation, and government cooperation with non-government agencies and organizations such as organized labor and professional associations. The picture you get is quite interesting, yet hard to grasp.

Evidently, power is being increasingly waged, exerted, by the non-government agencies which we create. At the same time we are busy making government more powerful and more clear. It appears as an arena in which huge organizations will vie for power and influence and we will probably become members of organizations which work against each other in some respects.

Our basic tendencies to organize, to get things done, will increase, and it will be through organization affiliation and associations that many of our activities will gain force and meaning. The case of uniformity versus diversity in this environment is argued. Some say that organizations will lead to greater uniformity; others predict that increases in productive capacity will multiply the number of alternatives from which we can choose, and thus diversity will at least be as important a feature as uniformity.

The fact that comes to our attention most often is the increase in demand for technical personnel, the sub-professional who is above the skilled worker and below the scientist. This is anticipated in education when people speak not only of the teachers, but also of the multiplicity of teaching aids and technical helpers. The increase of leisure time will allow for the expanded use of such technological aids to cope with the education that will be demanded

in the 1980 environment. Summing it up, it appears that we are destined to be a noisy, dirty, rich, noble, conductive, educated, leisured, intrinsically interlocked nation of people by 1980 and beyond.

Changing Roles

People will respond very well not only to their new social environment but also to modern technological improvements in education which stress learning at one's own rate and doing things on one's own. Thus there will be an opportunity to remain an individual within the new society. It is predicted that a lot of education would go on in the home, particularly at the level of higher education. The implication can be drawn that we would see a vast number of our traditional institutions, including universities and colleges, become anachronisms as more learning takes place at home via tele-communication, through computer set-ups for working directly with scholars while the student remains at home. This might even extend to secondary education.

A home communication center might consist of a lighted screen, a computer console, and a phone device for sending and receiving through links with an extremely complex nationwide network. Father buys the center and much of his function, paying bills, issuing orders, writing letters, and whatever else might be involved in his work, will be done through the machine in his study. Children will also be able to send and receive messages. Scientists claim that such a center will be technically possible by 1980, certainly by 2000.

Most educators don't predict any appreciable change in educational institutions as they now exist and they are wrong in my estimation! They predict more machines, more man-machine systems within the present institutions. They envision an appreciable part of one's education coming from outside school through communications channels and through other contacts, but supplementary in nature and not replacing the formal educational efforts. For the local systems by 1980 most educators do not anticipate any sweeping changes in the or-

ganized structure of staffing save for an increase in the number of teacher aides and technical personnel to operate machines - but I do anticipate some very necessary and dramatic changes which MUST materialize if our educational system is to survive and become a viable and useful institution in the decades ahead.

With all the changes that will be taking place in society, there will be an increase in the pressure for change in the U.S. educational systems. So far they have been able to withstand much external pressure, including technological pressures. To be truly effective, however, pressures need to change from external to internal. Head Start was an external pressure for improvement; now it's becoming an internal pressure for the same end. Government agencies and their external pressures for improvements have tended to make educational institutions somewhat defensive. Thus, it is recognized that pressures for improvement will need to become internal; and the work of existing research and development centers, which may become very powerful mechanisms causing fairly rapid changes, will need to become an intrinsic part of school structure. Research needs to become the basis for administrative decisions, but it will be resisted unless a series of bridges can be made from research to demonstration to policy to implementation.

Schools have become vulnerable to interdependency. On the other hand, innovational needs will require the schools to become more independent and more autonomous than they have been in the past. A system's characteristics are the result of the kinds of conditions we place it under and the more it is bombarded with external forces, the more it reacts with internal tension which can make meaningful changes, making it more capable of generating its own restructuring. Thus administrators should be made into planners and teachers may become developers or truly decision makers in those critical matters which affect the child's development. I think we can speak of the

guidance-oriented teacher rather than the didactic, content-oriented teacher as the image that must emerge.

An example may be drawn from the new teacher militancy. Administrators know that this indicates a need to redefine decision-making structure in the schools. But they don't know exactly how to do it. They need staff assistants to work out reasonable reorientation of administrative roles (jobs) with respect to decision-making processes in the schools. An educational administrator of tomorrow must develop options for the effective incorporation of the new teachers for the new education into the decision-making structures.

Some thought is being given in terms of the local school systems as the center for research and development and diffusion activity, possibly toward internalization of the whole process. Present research and development centers have not been able to establish any really effective linking mechanisms to the field, whether regional labs or school systems. One representative noted that, "We can't give research to these people; they don't know what to do with it." No effective strategy has yet been evolved to cause changes in the educational systems, and a fully effective feedback has not been established. No research works without feedback, for feedback brings information to the researcher which enables him to make revisions. Teachers tend to be very conservative, but often their conservatism comes as a reaction to changes that come so quickly that they are unable to adjust to them. Efforts must be made to convert teachers into highly responsible individuals capable of autonomous reactions to new programs, capable of being highly diagnostic, capable of creating learning situations that produce results which are measurable as feedback.

In the next five to ten years new developments are likely to come from relatively isolated groups. The government activities which were set

up to stimulate massive changes in education not only are not likely to have very much impact, but instead - if one looks at their present programs - will probably become custodians of the conservative elements in education. The regional educational laboratories will tend to value conservative behavioral patterns in education and the research and development centers will tend to preserve conservative values in institutions of higher education.

The regional labs and the like will continue to get a substantial supply of funds for different people than they have had previously. The manpower pool from which they will be drawn will be largely that of the teachers who sustain participation in the regional laboratories education programs, in the Title III programs, and the Title I programs, teachers from an already trained pool of people who are familiar with the school systems and their problems. Through these people, the schools will evolve their own internal research and development function. This will make the teacher shortage more acute. To help alleviate it, sub-professional people must be substituted in structured research roles and technology can help wherever it can be successfully applied. Education will profit greatly from having individuals in some of the adjustive roles who have not previously been socialized into the teaching profession. This is one way of keeping the institutions more viable. It will be necessary to call on representatives of other professions, experts and writers, who can have a marked effect in the area of curriculum development.

"Foot Locker Teaching"

Another element emerging in the confrontation between teacher and technology will be the proliferation of "educational foot lockers" described as packaged self-instructional learning systems crafted to a high degree of reliability and learning validity. Both large and small packaged units will be developed by government-supported projects and by the new educational industries. They will consist of textbooks, a series of readings prepared in

advance and quite different from the traditional textbook; a teacher's guide, which will list for each day the way in which the teacher will present the materials; and a programmed workbook to go along with the text, as well as teaching aids, and all apparatus and equipment necessary to carry out the laboratory experiments. There will also be a laboratory manual for the student. The packages will be mailed in advance and the teacher will merely have to sort out its contents, assemble the elements, and administer it - confident that the package will produce the pre-determined and required learning.

Of course it will be pointed out that such "foot locker" teaching renders little opportunity to the teacher to operate freely. "Foot locker" teaching also appears to be inconsistent with the notion of the teacher as a focal change agent in education. On the other hand, it is likely that this development, more than any other, will force the restructuring of the teacher role for the better. As a result there will be consideration on how to make the teacher more analytical in order to have an interpreter of the feedback. The new package or program may be a by-product of a program whose real intent is to get teachers involved in the inquiry about educational processes. Teachers will now need to work with concretes and abstractions, they will manipulate variables, and generalize about basic processes. This will help them to rise to a higher level of understanding and to see relationships that enable them to make viable predictions. They move from intuitive learning to a more formal kind. In a sense, teachers may get into the role of theorists as well as experts in mental health and interpersonal communication.

A great need among teachers will be of someone who will listen, for a long time, to their problems and give them encouragement and support to try out new ideas. A great untapped resource is the creative power of teachers, which needs someone who will stimulate it. Just as important as listening is the

discussion of new ideas to enhance greater motivation. Within a more complex educational framework, the teacher will need to feel free to make adjustments, to try something different.

Curriculum development projects will probably continue to be worked through in-service education, to which teacher-preparation programs will have to adjust. The latter usually gets by - passed by successful innovators who bring pressures from outside.

Schools of tomorrow will utilize a new person, an instructional systems designer and engineers and behavioral technologists who will know how to use flow charts, work with computer assisted instructional systems, teach people to write programs that instruct, handle hardware and software and data flow. They will understand man-machines interaction and show how people learn and make decisions. Their emphasis will be on the software and they will be to some extent a human activity analyst. They will need to maintain running accounts of all projects, even of failures and semi-successes. They will need knowledgeable subject matters (content) experts on hand. They will need to examine community goals, evaluate the programs and the people. They must be linked to the new teachers who will be diagnosticians, evaluators and managers of learning, close to the programs and the real work, observing and formulating. They will need time to play these multiple roles.

Educational systems will borrow the time of professional researchers, perhaps from the colleges on a shared-time basis. They will get researchers, scholars, and practitioners into closer proximity to develop worthy laboratory programs. Meetings, information exchanges, and conference-type activities will permit outsiders to visit; these will utilize the group approach for idea dissemination.

By 1975-1980 the new teachers may become the main link with the research and development centers which may provide by then long-term support for projects

involving these same teachers. By that time, the centers may take three kinds of direction: Either glorified school study units with more money than normal, course content improvement centers, or useful field agencies for ERIC (Education Research Information Center), housing switchboards for massive communication. They could also produce more packaged teaching units, and thus would need more personnel for this work. If they take any one or all of these directives - we can anticipate drastic changes in their roles.

Actually, education will become more research-oriented and will involve people from other disciplines. Certain top schools in the country will initiate some development units within their own structures and these units will become sustaining parts of their own organizations, producing and expanding, inventing and designing, all internally. Through these programs teachers will find opportunities to participate in demonstration units. Teachers might even help design programs. As colleges and universities continue to house some courses' content development projects, they will be comfortable places for things to get started and people from other disciplines will be attracted into a working relationship on an educational project from time to time. They may tap regional education laboratory monies to foster development activities in the field. They will offer consultant services. They will see some modification of graduate instruction to fit present frameworks, and they may possibly draw from business and industry certain production aspects of their own work. Diffusion of information so produced should have a cumulative impact that is hard to measure. Perhaps some development requirements in higher education may evolve.

New Adjunct Roles For the Teacher

There will be a growing concern over personnel obsolescence in education. To offset this threat there must be a strengthening of federal funds for institutes, NDEA fellowship type programs, to retrain personnel for the newly emer-

ging roles in the school systems. These will have to be coordinated at state-level departments and with other units for in-service training on instructional and administrative levels.

It appears necessary that regional labs become part of the Title III program and be taken away from Title IV, from the cooperative research part, or they may become administrative agencies of Title III.

It is possible that large sums of money might tend to constrict the pioneering spirit, the creative sense, and might drain energies to the point where personnel will become bureaucratic, justifying rather than innovating. By actively involving themselves in the decision-making process with respect to educational innovations, teachers can prevent this from occurring.

Publishers will develop the market for the new materials. Thus, if rational units produce quality materials, publishers will probably become involved in testing and validating materials, and will be employing more research and development than at present. The question of public domain and copyright will need to be resolved - and the role of the teacher here needs to be defined.

Administrators will be more politically active and educational legislation may turn toward great utilization of quality judgements. Since the rebuilding of cities will be a major task, reconstruction of the local school systems within them will also be paramount. Local schools may invest a percentage of their funds in research and development and may adopt more powerful adapting mechanisms. Here again it remains to be seen whether the teacher will be merely a reactor to these developments or a significant "heuristic" element.

Teachers will increasingly become qualified in psychometric competencies or work closely with psychometricians at a time when there is developing a greater need for psychometricians. This is a new role for which personnel is

lacking. Psychometricians - hopefully working with teachers - will play an important part in the evaluative process. In research, some will serve in liaison roles, and could probably be trained on the job.

Teachers will need to work closely with information men to gather and collate information rapidly and perhaps to predict consequences of certain activities.

Teachers will need to work closely with individuals with ability in the behavioral sciences and with facility in working with educational organizations.

Teachers will need to work even more closely with persons with journalistic experience and ability in technical writing; specialists in research design, instrumentation analysis, communications, videotape production and transmission, as well as human relations analysts will be in demand.

And, finally, teachers will need to write monographs, to prepare texts, to develop such adjunct instructional materials as case studies and audio-visual aids. They will need to study administrative behavior and process, and to develop adjustive mechanisms that will effect improvements. They will need to develop a network of relationships, especially in dissemination.

The Confrontation: A Recapitulation

For centuries, education and training have been categorized within the realm of the arts; they have not been classified as sciences. Yet, in an age of atomic energy and aerospace, of electronics and technology, the educational profession has been content to grapple with correlative problems of education and training using "horse and buggy" education and training systems or non-systems. The effort to apply what we know about learning to the art of teaching has been a colossal failure in terms of what should have been done and what merits immediate action.

Every day there is more to learn, yet there is less time for learning it.

The crucial time constraint must be the mandate for a new education and training technology, for an educational process responsive to, and consistent with, late 20th century challenges. Educational technology seeks to develop a set of axioms to support what must inevitably become a science of education.

Technology is producing a broadly based shift from a blue collar teaching force to a white collar teaching force. The stresses attendant upon this shift can be eased only if the problems created by technology are in turn solved by technology. A thriving, robust educational technology must inevitably lead to the development of new, effective, efficient educational systems made up of integrated materials and elements designed to perform specific educational tasks with a high degree of reliability for a particular group of students.

It is likely that in another ten or twenty years educational and training innovations will have become as common as TV sets and automobiles, providing ideal instruction for every student on an individual basis. If this occurs, its origins will be directly traceable to the innovative murmurs that are presently being heard in the efforts in programmed education, computer-based learning and in the emergence of the systems thinking and analysis with respect to education.

A need for educational technology was highlighted in President Johnson's message of January 12, 1965, to the Congress concerning "Full Educational Opportunity". President Johnson said:

Specifically, four major tasks confront us:

1. To bring better education to millions of disadvantaged youths who need it most.
2. To put the best educational equipment and ideas and innovations within reach of all students.
3. To advance the technology of teaching and the training of teachers.

4. To provide incentives for those who wish to learn at every stage along the road to learning.¹

Again, the section of his message dealing with "regional education laboratories," the President said:

I recommend (that we)

Train educational research personnel.

Provide grants for research, development of new curriculums, dissemination of information, and implementation of educational innovations....

We are now embarked on another venture to put the American dream to work in meeting the new demands for a new day. Once again we must start where men who would improve their society have always know they must begin - with an educational system restudied, reinforced and revitalized.

Again the requirement for education innovation based upon educational technology is emerging from the necessity for change in our educational institutions. This requirement has more pertinence today and a more compelling quality than it ever has had in the past:

Assessment of American education is today a matter of great public concern. Debate on educational issues is not new in America. The current debate, however, is animated by a new spirit of urgency due to an unprecedented awareness of human potential for progress. Man's destiny appears to depend upon his acquisition and use of knowledge. Public concern is based, in short, upon a new sense of the relationship between the quality of education and the future of America.²

Obsolescence is not the only problem. Not only have we been educating increasing numbers of young people each year, but our schools have also been holding higher proportions of them for longer periods. Twenty years ago

1. Italics supplied

2. An Essay on the Quality in Public Education, Educational Policies Commission, National Education Association, Washington, D.C., 1959, p. 5.

about half the 17 year olds graduated from high school; now around 70 percent do. We have been building 65,000 to 72,000 classrooms a year, well above the rate a decade ago. It is anticipated that elementary and secondary school enrollments will jump from 36 million now to 44 million by 1970. This means that we will require more than 500,000 new classrooms by 1970, a far greater number than will be produced at the current rate, as high as it is. Also, it is argued, we will need 400,000 additional teachers in the next five years. We will need more and better counselors; stronger programs for gifted students; improved curricula for average youngsters; increased research and experimentation in reading, testing and learning; more modern vocational programs, and so on. Increasing school taxes are not likely, since World War II state and local tax payments increased by 220 percent as compared to an increase in Federal taxes of 85 percent. At the same time, state and local bonded indebtedness has risen more than 300 percent, compared to a Federal debt increase of about 12 percent.³

The master teacher not only has a firm grasp of the knowledge and skills that he wants to impart to others, but also he is able to structure learning experiences for them out of which, he hypothesizes, learning will emerge and knowledge and skills will accrue.

The teacher is essentially a generator of hypotheses. When he generates a hypothesis, his next step is to test it. The failure to test has kept instruction a nebulous art rather than permitting it to develop as a science. We have been content simply to make educated guesses about the things we do as teachers. If the teacher were to test his hypothesis and find it wanting then his only alternative would be to modify it and try it again, and again, and again - ad infinitum. This takes time, more time than any one teacher

3. The facts in this paragraph come from "The Fight Over Federal Aid to Schools," Changing Times, The Kiplinger Magazine, February 1965, p. 43.

has. But we can hope, as we shall presently see.

If an educational technology ever develops, it must of course be subject to verification of its adequacy. Many teachers believe that the most useful part of their training was practice teaching, or experience, rather than courses in professional education. What is it about practice teaching that gives rise to this belief? To what extent does it provide the most effective training for the would-be teacher? Why do the usual courses in professional education give the impression, valid or not, that they do not have enough substance to train teachers in the skills of pedagogy? All these questions may equally be asked about training people to train others.

We cannot determine how any particular process, procedure, or course will improve training ability until we are able to define in precise terms what are the specific skills of pedagogy and how they can be validated. We must be willing to measure teaching ability not by what the teacher does but by what happens to the student and how he ultimately performs. It is for the student that we must structure the experiences out of which, we hope, he will learn. It is, therefore, the student's performance that we must observe both prior to and following his instruction. It is observing and evaluating performance and behavior, and only this, that will help us to determine how successful we have been as teachers.

We do not lack methods, ideas, procedures, or subject-matter knowledge. What we do lack is something substantive in the training of would-be teachers to validate those skills which are successful in modifying the behavior of students. We need both quantitative and qualitative measures of what happens to the student and how he performs. An educational technology of any significance would be able to assess the difference between a successful learning experience and a relatively unsuccessful one. It would do even more. It

would delineate several possible explanations of why one experience was successful and another unsuccessful. The professional instructor must accept the commitment to and accountability for the results of the learning experience.

An educational technology worthy of its name, then, assists instructors in analyzing the structured learning experiences which fail to teach students. William A. Deterline provides us with some insight into the possible reasons why many instructors find this difficult to do:

In many cases even an experienced and skillful instructor will not be able to identify those subtle causes of a breakdown in instructional communication....Most instructors, whether they are aware of it or not, make use of technical expressions, technical words, complex grammatical structures, and ambiguous or too-terse statements at a level of complexity that is not appropriate for the students....One difficulty is that the instructor is often unaware of the cause of the breakdown of communication and the basis for confusion....Most instructors who are proficient in the subject matter...often are ineffectual in their instructional presentations because they do not know the material from the point of view of effective sequencing for instructional purposes, and/or are unable to be consistent in presenting the material at a technical level that is understandable, and in doing so in small enough steps with adequate repetition, examples, clarifying analogies familiar to the student, and so on.⁴

Teachers who know how to teach and do not know what to teach are as common as teachers who know what to teach but who do not know how to teach it. Both are equally deficient. A scholar who cannot communicate his wisdom is just as inadequate as a pedagogue who has no wisdom to communicate.

Out of the learning experiences which we build for the student, what really happens? How has his behavior changed? How did he behave before he came to us, and how does he behave after he leaves us? What is the real value of the learning situation created by the teacher for the student? What knowledge, skills, and attitudes does the student now possess that he did not have before he met the teacher? Until we evaluate our teaching effectiveness by the product instead of the process, by what happens to our students and how

4. William A. Deterline in a letter to the author, March 1, 1963/

they subsequently perform rather than by secondary criteria, we will never get to the reason why we are failing to instruct or train while doing what we know how to do in the best way we can.

Education and training technology have not been able to keep up with the innovations of technology itself. We must turn with hope to the conviction that the problems created by technology will be solved by technology. Can training truly become a science? Is a science of instruction possible? Can the science of learning be applied to the art of pedagogy? Technology is the application of science to art. Can the studies of the behavioral scientist concerning the fundamental processes of learning be applied to training and education? If training will always remain and never become a technology, what is our alternative? And ultimately, will our desperate need for an educational technology be sufficient in and of itself to create a breakthrough?

Through educational technology, we can package the systems of learning which can be transmitted to students when they need it and where they need it in the most economic and feasible manner. To accomplish this task, however, we need to develop a technology of education which is based upon knowledge of behavioral technology, communications technology, and instrumentation (media) technology. But more than this we have to fully exploit what we know of learning and apply it to the art of teaching. Therefore, we must look again at the pedagogical processes underlying education - and to the teacher who must manage the processes and the instruments of the new education if she is to have any significant role in the school of tomorrow.

Paper Presented by Dr. David Purpel
at the Massachusetts Advisory Council Conference on December 9, 1967

STUDENT TEACHING AS AN AGENT OF COUNTER-REVOLUTION

To speak of student teaching, one must by necessity speak within a wider framework since student teaching is almost always but one aspect of a larger teacher training program. I would like to speak today of the role of student teaching as it relates to a relatively particular set of functions of teacher training, those that relate to the persistent dilemma that faces all teacher educators, namely the distinction between the responsibility to prepare for the teaching role as it is and the responsibility of preparing teachers for the role as it ought to be. Alas, the gap between reality and various utopian visions is immense. This is not to say that these two responsibilities constitute an either/or choice for teacher educators but there clearly is a question of emphasis and stress. The major theme of my message is that teacher education in general and student teaching programs in particular have definitely tended towards programs oriented to the problems of adapting to and coping with the role of teaching as it essentially is. Teacher education has traditionally been in the now generation.

There is the question, of course, whether or not this is or is not a wise emphasis. There can perhaps be two general justifications made for this overwhelming emphasis on training for the here and now. One such possible justification is that the current educational system is by and large doing a fine job and there is little reason to make any drastic changes save for further refinements and improvements. The other general justification could be in the contention that says that yes the schools need important and basic changes, but they can and will have to be made within the existing formal structure. Let me deal with each of these positions.

First, as to the view that the existing arrangements are to a considerable degree performing their functions at a reasonable level of competence. The problems of dealing with this view are quite tricky and complex. Whenever I try to be fair about answering an argument I ask myself about the existence of a straw man. I must confess that when I wrote this I wondered if in fact I had created a straw man, one who professes to be more or less happy with the present system. I must further confess a sense of some bewilderment and guilt about even positing the possible presence of a straw man! Surely, it must be a new high in cynicism to even suggest that one who is relatively proud of our current educational effort could be a creation of the imagination. Remarkably enough, however, it is relatively rare to come across an educator who speaks with pride, confidence, and security about the now. There are defensive statements, there are "Yes, but on the other hand...." retorts to criticism, and there are brave words of reaffirmation of basic education goals but there is a disquieting mildness and unaggressiveness about the positive statements made on our educational system.

Yet, there is very strong but indirect and negative evidence for the basic acceptance of our present endeavors. This acceptance is revealed ironically enough in the nature of the various proposals for change, which we know are legion. An incredible array of innovations, proposals, programs, operations, etc. have been explicated, disseminated and even implemented over the past 15 or 20 years. These vary from the uses of technology to the curriculum reforms and proposals on organizational and structural changes. As varied and sweeping as these proposals and plans may be, the great majority of them do have at least one fundamental characteristic in common and that is a tacit acceptance of the present basic educational framework. Virtually all of the so-called reforms, innovations, revolutions or what-have-you constitute refinements, im-

provements and adaptations within the basic structure. I submit that this is indeed striking testimony to the thesis that the existing educational arrangements are considered by many to be essentially sound.

Perhaps, I should clarify this point by indicating more specifically my notion of what I mean by the basic educational framework. I mean those arrangements which operate from the following assumptions:

1. That the basic criterion of a "good education" is the ability to receive a bachelor's degree.
2. That the heart of a good education is the ability to be verbally skillful in five general academic areas (English, Science, Social Studies, Math, and a Foreign Language).
3. That the basic educational objectives are the "ability to think" and to be rational and that these objectives can best be met by study in these same five areas.
4. That these objectives can best be achieved in one or two years of what is interestingly enough called "pre school education", 12 years of elementary and secondary schooling, and four years of college and that these activities are best conducted in buildings called schools and in settings called classes or courses.

It seems to me that these four general assumptions about education constitute an unwritten testament of faith common to both the Establishment and the Anti-establishment in American education. This tacit acceptance by so many educators of these assumptions constitute to me an essential affirmation of the fundamental soundness of our educational institutions. There are, to be sure, enormous efforts, many of which are ingenious and sophisticated, to greatly improve and refine the quality of the activities related to this framework but this does not change the rather amazing consensus on a more general level of

what constitutes a general education.

Thus, from this point of view, there is ample justification for the overwhelming emphasis that teacher training institutions place on preparation for the role as it currently is. However, this justification is only as valid as the set of assumptions that underlie the framework. Are these assumptions so powerful that they can withstand any criticism? Here again, I am in a quandary because I face the anomalous picture of some of the very people who are working mightily to maintain this framework being simultaneously in a malaise about its validity. Am I contradicting myself when I say that educators are essentially agreed on a relatively narrow definition of education and that at the same time they often exhibit major misgivings about this framework? I think not. I think rather I am reflecting the slow but steady increase in the thinking of the unthinkable, namely that there is something basically and fundamentally wrong, not only with operational aspects of the system, but with the very system itself. I firmly believe that these very faint signs of an agonizing reappraisal are effected by the basic confrontations on the validity of our social and personal values forced on us by the crises in the cities and in Viet Nam. These crises have enormously accentuated an already growing trend towards basic reconsideration of our culture in notions of marriage, sexual behavior, child rearing, and of a variety of political, economic, and cultural institutions. In our confrontation with these searing problems many educators have rediscovered the old notion that formal education ought to be related to society. When we look at our society and confront the increasing alienation and anomie of urban living, the continual deterioration of confidence in any system of values and ethics, the alarming degree of cynicism about our political structure and our political leaders--when we say that the solution to the problems of war and peace, of racial harmony, of justice and brotherhood lie in the hearts and minds of man--when we view all this and then look to what our formal educational system is doing, we,

or at least some of us, are apt to wonder if schooling and education are the same.

What in fact is our formal education system doing? How are the millions of professionals and the billions of dollars being used? Are they being used primarily to clarify the basic questions of man? Are the schools concerned with matters of wisdom, justice, and mercy? Are they helping us wrestle with the titanic problems of human survival with nobility?

Obviously, much in our educational program represents efforts in these areas and a good deal of it is of high quality. However, it is my view that such efforts are greatly scattered and infrequent and that for the most part our formal educational system is functioning for purposes other than those I have presented. Instead the schools are functioning to serve certain sociological needs, namely those of maintaining the social class system and by providing for mobility within that system.

The educational system sorts us out by largely determining whom we will marry, where we will live, and what jobs we will have. This is not to deny the validity of this function but the tremendous stress on this function has had at least two major effects on the educational scene. First, there is, in the wake of this emphasis, the enormous psychological anxiety and stress felt by parents and students, and the increasing cynicism, about the simultaneous increases in the irrelevance of and importance of schooling, a cynicism that borders on corruption. In addition, the other price we pay for putting so much effort on the social class functions of education is that efforts that might be devoted to developing alternative modes of education are diverted towards maintaining and refining the existing arrangements.

It might perhaps be wise to summarize my presentation to this point. I am discussing the relevance of present student teaching/teacher training practices

relative to the dilemma of emphasizing training for adaption to the present role rather than preparing teachers to teach under optimal conditions. My position is that teacher training practices in general and student teaching procedures in particular tend to emphasize an adapting attitude and I have suggested two general sets of reasons why this is so. So far I have talked about one of these general reasons, i.e. the view that emphasizing training for the present role can be justified on the basis that the existing educational arrangements are essentially sound. In explicating this view I have presented a rather tangled and complex picture in which I see surprisingly little direct and explicit support of the present system but a great deal of implicit acceptance as manifested in the nature of the enormous amount of essentially conservative proposals for innovation. I am, however, also suggesting on the part of many of our educational leaders an increasing uneasiness and nervousness about the validity of the system that they have worked so hard to perpetuate.

I would now like to move on to the second set of reasons that could account for the emphasis on the teaching role as it is. This is the position that holds that the present arrangements are not entirely sound but that basic reform must come within the existing school structure. The argument usually goes something like this: Whether we like it or not the schools are here to stay - they constitute the single most formidable educational resource and this cannot be ignored. Attempts to reform education without working with the schools are naive at best and at worst represent an arrogant and arbitrary denial of the resources that come from a dedicated and experienced profession.

This is a strong and compelling argument--one that makes obvious sense. It is basically the strategy that wise, shrewd, and intelligent educational leaders have persistently and intensively used. There is one problem with this strategy and that is that it doesn't seem to work, for very little has changed in the

basic and fundamental ways which we use to educate ourselves in the past century. To be fair, there is one area in which important and fundamental changes have occurred over the years and that is that by and large we are more humane towards students than we once were. However, with this very important exception, there is a remarkable stability and uniformity across time and space in our formal educational system.

There are many reasons for the inertia of formal education, most of which originate in the society as a whole and to a lesser degree in higher education circles. However, the professional education community has also participated in the continuation of the ancient and vertigial forms that pass for a system of education. They have done this by not providing leadership for the society, by devoting their energies to maintaining and perpetuating the status quo, and by being submissive and humble. No where is this process more evident than in our teacher training patterns and no more dramatically and symbolically within teacher training than in the various student teaching programs.

Student teaching presents such a rich and significant metaphor because it is so popular, so universally acclaimed, and because it represents a major intersection between the school and the university. We all know about the unique consensus among professionals and trainees alike that speaks to the universal imperative of the importance of student teaching in all teacher training programs. Why is student teaching so popular and so passionately presented as the savior of teacher training?

Obviously, it is popular to trainees because for many it is exciting to teach children. However, I believe there are other explanations for its popularity related to the usual forms and practices of student teaching. My contention is that the usual criterion for "good" student teaching is how well it approxi-

mates "real" teaching. The more real the student teaching the better everyone seems to like it, the university, the school, and the trainee. The most serious criticism, save for the quality and quantity of supervision, that is usually made of a student teaching program is that it is unrealistic, that it doesn't give the trainee a sufficient taste and feel of the teaching day and role. Even the lack of supervision for student teachers is sometimes rationalized because "when they get jobs they won't have any supervision and they might as well learn how to get along by themselves."

The popularity of so-called internships comes in part from their being perceived as equivalent to a "regular full-time teaching role." Indeed, many teacher training institutes pride themselves on arranging internships that are "the real thing!" and indeed many, if not most trainees, are very much attracted by such arrangements. The schools are very much interested in "real" student teaching arrangements because it gives them an opportunity to socialize trainees into accepting the reality of an irrelevant curriculum taught under ludicrous conditions. It gives the schools an opportunity to say "Well, that may be right in theory, but in practice, etc." and "It's time to forget all that dreamy stuff they've been teaching you at the university." It gives the school its first major opportunity to pluck the stars out of the trainees eyes. Indeed, there is considerable clinical and empirical evidence that the trainees' attitudes towards school, education, and children suffer as a direct result of their student teaching experience. They tend to become more cynical, more distrustful of children, more discouraged about the children's abilities, and intentions, in a word--more realistic. This socialization process, of course, accelerates dramatically in the first year or two of regular teaching but the beginning of this shaping of trainees into teachers begins in the student teaching phase.

The university and the trainee are also culpable in their general acceptance, nay, enthusiasm for "realistic" student teaching. I say culpable because

I believe this enthusiasm is misplaced and overemphasized because of a basic misinterpretation of the purposes of student teaching. In my view, the purpose of student teaching should not be entirely the acquisition of the teacher's present role, but that an important and essential ingredient must be that of a student of teaching, i.e. to gain insight into the process of learning and teaching. Student teaching ought to be an opportunity to learn about students, about oneself as a teacher, and how all these elements interrelate. Whether this function can best be done in the context of actual teaching conditions is a moot point, but it is clear that student teaching is generally more effective as a screening and socializing device than as a technique for clarifying the nature of teaching and learning. Student teaching becomes the moment of truth, and the time to separate the teachers from the boys (and girls). Student teaching is usually considered successful if it helps candidates to become excellent teachers under present conditions.

I believe the universities have eroded their responsibility to inspire and encourage their students to seek greatness by collaborating in such conservative student teaching practices. (Some of the new breed teachers call them counter-revolutionary.) It is even more depressing when one notes that many teacher training programs contain exhortations for excellence and for re-examination of fundamental assumptions only to have these efforts undermined by so-called "realistic" student teaching so readily approved of by the trainees.

It is often said that teachers teach the way they are taught. I submit that our people learn to teach during their student teaching and in their initial years as regular staff members and that they are taught to cope, to adapt, to accept, to be pragmatic. Is this the way children are taught? I fear so!

I see the teacher's role as one of being a social philosopher--a person who has a vision of the noble society and the good man and one who tries to help students get closer to that vision. I see the role of teacher training to

help teachers develop both the vision and the appropriate teaching techniques. Teaching is a noble profession; teacher training should be conducted in a noble manner. Do we encourage teachers to think in noble terms, to develop a vision, to be bold, to be social philosophers and leaders by teaching them to be adaptive and accepting of a system that has so few ardent and explicit admirers? Do we inspire teachers to work for basic changes in the curriculum and structure of formal education by stressing political and pragmatic considerations? Do we press students to provide quality education for each and every pupil by helping him to cope with 5 classes of 30 pupils each day? Do we demand that trainees reconsider the basic curriculum by letting him teach anything providing it's in one of the five sacred academic areas? I think you know where I stand on these questions!

The purpose of teacher training institutions is not to prepare people to keep school. Its purposes are rather directly related to social goals, to help our society and its people to achieve greatness and nobility. If we have any faith in education we must realize that the period of teacher training is critical in that it sets the tone, the scope, the dimensions and the expectations of the role. If we want to set a tone of high standards, of bold and dedicated leadership, and of high and noble purposes--then our teacher training programs, particularly the student teaching aspect, must reflect these concerns.

Let me put forth a few suggestions on how Student Teaching might become an agent of revolution rather than one of reaction. First and foremost, colleges and schools must face their responsibilities above and beyond those of manning the battle stations. They must accept the responsibility for encouraging basic criticism at the most fundamental levels of the entire system. Second, both institutions should observe restraint in their enthusiasm for reality training by encouraging trainees to seek out and teach under ideal teaching arrangements. Third, both parties should provide opportunities for trainees to take personal

and individual responsibility for the nature of what goes on in the classroom. It is reassuring but perhaps dangerous to explain reality away by referring to "the system" and to "they" and thereby encouraging detachment and non-involvement and therefore irresponsibility. Fourth, there should be less emphasis on learning classroom techniques and more use of the classroom as a laboratory in which to study children and teaching in some kind of social and psychological framework. Student teachers should be asked to consider not only the pedagogical advantages of a discussion technique over a question-answer approach, but also to consider broader questions like: What do children see as their role in school; what kind of behavior do we like to see in children-aggressiveness?-docility?-courtesy?-hostility?-submissiveness? Why are we studying this particular curriculum? How does the community view the school? What is the nature of the community? Does it have any effect on what happens in the school? Is this curriculum typical or atypical of American schools? Why or why not? Why is one teacher more effective with the same children than another?

Let me conclude this presentation with a plea that we each of us examine our souls on the degree to which we are content with the existing arrangements for formal education and the degree to which our work is perpetuating these arrangements. It was not my purpose today to place more blame on one institution or group than another--we all of us have much to answer for. Who is more to blame is of trivial importance--what is crucial is our willingness to accept our responsibilities as social leaders and our will to meet these responsibilities in the manner and form appropriate to our different abilities and vantage points. Our responsibilities are noble and gigantic ones and our responses should be commensurate--for we are concerned not primarily with schools, teachers, or even education--but with the very soul of man and society.

(Synopsis of a presentation made by James F. Baker, Assistant Commissioner to the Committee assisting the Advisory Council in its study of teacher certification in the Commonwealth--December 14, 1967)

ANOTHER LOOK AT CERTIFICATION

Introduction

Certification, a blessing or a curse, has been part of the educational scene for some time. It will continue to be part of the scene in the future and as such merits periodic examination.

No one would take exception to the proposition that the all-encompassing reason for certification is to improve, strengthen, and advance the teaching profession. In practice, however, certification has identified minimal standards for entrance into teaching, and in so doing, has tended to keep out the charlatans, incompetents, and unprofessionals from responsibility for the guidance of the intellectual development of children and youth.

How closely akin are certification practices and advancement of teaching? The thesis of this paper is that they are not and that relatively little attempt has been made to relate minimal standards and professional growth.

Research Reports

Advancement in teaching implies progress toward excellence, but excellence or high quality teaching has not been too clearly defined. Studies evaluating teaching have followed two pathways or criteria: (1) the observation or judgment of teaching by administrators, supervisors, peers and on occasion, students, and (2) the ranking or evaluation of teachers based upon measurable changes of behavior of pupils. The results of these studies are discouragingly inconclusive and occasionally contradictory. For example, unless observational criteria are carefully structured, conclusions by different observers (e.g. administrators) may be very inconsistent. In fact, pupil judgments--irrespective of their validity--have had as high, if not higher, reliability than those of any other group.

When such teacher data as grade-point-average, grades in student teaching, degree status, and years of experience are compared with the achievement test growth of previously equated groups of pupils, relatively low correlations are found to exist. Even intelligence (IQ) of teachers shows at times no or low correlation with the criterion and at other times some to marked correlation with pupil growth.

Massachusetts Certification

During the 1965-66 school year, as reported to the Division of Research and Development, approximately eight per cent of the Massachusetts teachers were not certified. This non-certification ranged from no non-certified teachers in some school systems to above twenty per cent in a few others. Frequency of non-certification was as comparable in high per-pupil expenditure towns as in minimal expenditure towns. Non-certification occurs in certain secondary subject fields (foreign language, industrial arts) more frequently than in the general elementary area.

Although not completed to date, evidence from the New England Educational Assessment Project indicates that a sizeable number, perhaps ten percent of the secondary school teachers do not have their primary teaching assignment in areas for which they are certified.

It may be concluded from the above that

1. Evidence has not yet been presented to validate (nor invalidate) the present degree possession, credit counting system of certification, and
2. Though identifying minimal credentials, certification does not present evidence of encouraging advancement beyond the "admittance to the fraternity" level.

Recommendations

With recognition of the present limitations of the existing system of certification and hoping to devise some system of encouraging professional growth and improvement within the profession, a plan emphasizing two levels of certification or endorsement is presented below. These levels, with no restriction or predilection on the terminology are labeled as Associate and Professional.

The philosophy of the Associate level is one which reflects minimal standards or criteria for entrance into the teaching field. It is based upon a first criterion of possession of a bachelors degree from an accredited institution and endorsement through one or more of the avenues listed below.

- a. Academic--basically, the present system of a prescribed number of semester hours in a listing of courses and participation in practice teaching
- b. Internship--progress through a supervised internship program for a period of time (1 year) developed and sponsored by a local school system, a professional school, or a professional association
- c. Experience--successful completion of an experience record, reported and attested to by a superintendent of schools or supervisor over a significant time span (three years)
- d. Peer Evaluation--evaluation by observation teams of teachers required to observe, report, and evaluate such teaching activities as methods, knowledge of subject, development of creative learning environments, and related professional behaviors over a planned period of time
- e. Professional Examination--evidence of achievement above a specified criterion score on a professional battery such as developed by Educational Testing Service in Princeton, New Jersey
- f. Authority Endorsement--endorsement by a college or university of the graduate's successful completion of its teacher-preparation program

Completion of the Associate level classification could imply qualification for employment at the State minimum salary and might justify yearly increment recognition for successful teaching services.

The philosophy underlying the Professional level is quite different from that of the Associate. Its emphasis is upon continuous professional growth, continuing education, and repeated evidence of excellence. It is suggested as a status not necessarily possessed forever, but to be renewed at three to five year intervals. While possession of the Associate level certificate and a suggested minimum of three years experience would be initial requirements for the Professional certificate, evidence related to merit criteria selected from the following would be presented periodically to a local, area, or State professional standards committee:

- a. Research and Experimentation--involvement, or direction of educational research activities and experimentation related to current educational issues and procedures
- b. Professional Leadership--chairmanship or direction of committee activities; participation in in-service educational activities; involvement in state and national professional activities contributing directly to the advancement of education: staff leadership through supervisory activity
- c. Academic Advancement--professional or academic activity as evidenced by award of advanced degrees
- d. Pupil Growth and Achievement--diagnosis, individualization of instruction in relation to diagnosis, and evaluation of pupil achievement in light of critical educational objectives
- e. Creativity in Learning Environment--development of instructional aids, application of technological advances, development of creative learning materials, creativity in demonstrations, and effective utilization of community resources
- f. Community Participation--development of effective liaison activities between the community and the school, community leadership effecting the advancement of the school system, encouragement of effective pupil learning in the community

The suggested Professional level classification would be possessed by a relatively small percentage of the teaching staff--ten to twenty percent. Salary schedules, while providing yearly increments for Associate service, would provide much higher increments upon attainment of the Professional level. Unless renewed within prescribed intervals, professional increments might be withdrawn and replaced by associate level increments. In most instances continued performance at a professional level would result in considerable differentiation between salary and professional status for the associate and professional staff personnel.

Teachers continuing at the professional level would merit recognition by their peers, by the administration, and by the community as individuals dedicated to the pursuit of excellence in education. Inducements should be

provided such individuals to encourage their continuance in the classroom, to encourage their continued operation where their talents have already been proven.

Conclusion

Is the above workable? Does it merit study, investigation, and trial? Are there implications in the reader's answers to these questions regarding the certification level--Associate or Professional--for which he might qualify?

G I V E U P T H E S H I P !

**Alvin P. Lierheimer
Director, Division of Teacher Education and Certification
State Education Department
Albany, New York**

Present inadequacies of state certification are examined and a new approach to the licensing of teachers is proposed in this paper prepared for the Massachusetts Advisory Council on Education and delivered on February 3, 1968 at the Boston University Law School

GIVE UP THE SHIP!

Americans have always been stirred by the motto, "Don't Give Up the Ship" but I suggest to you that in talking about certification contrary advice is indicated. We had better give up the ship because it is sinking. Those glorious words of Captain James Lawrence in the War of 1812 didn't save his ship, the Chesapeake, and they're not likely to save ours! In the event that you turned in late, this is not a lecture on 19th century naval warfare; the original charge given to me was to speak on certification standards with resilience.

Now without carrying the nautical analogy too far, I should say it would be best not to abandon ship until at least something floating is within reach which appears to be going in our direction. Simple abandonment of certification or just turning it over to someone else will solve nothing. Many years ago certification action was taken by local superintendents. This arrangement was fraught with all the scandalous inequities one could imagine. Some of today's spokesmen in education survived this era. They may not relish a plan that sounds like a return to those days. No one is advocating a simplistic return to these days.

I am proposing a teaching personnel function at the State level which would scarcely resemble certification as we know it. In carrying out its teaching personnel function the state office would maintain a data bank of information about all teaching personnel; the office would be concerned more with building restrictive walls around it; the state office would help schools set up teams to evaluate the competence of potential teachers to fulfill new and differentiated educational functions; the state office would monitor lo-

cal evaluation plans and maintain a research arm to determine improvements; the state would use data processing techniques for record keeping and to provide critical summaries of supply and demand to assist higher institutions in their long-range planning.

What's Wrong With Certification

As a state director of certification I get more than my share of criticism from disappointed certificate seekers, their husbands, attorneys, and legislators. One must observe, however, that letters of criticism result from anger and not reason. Some are so crude and vituperative one wonders how such a temperament will be received when the candidate faces a class of slow learners. Seldom have any of our critics, either individually or through professional associations, attempted to plan a satisfactory alternative to the existing approach to state certification. How inconsistent it is that professional associations of teachers seek more power to set standards of certification themselves and at the same time pass resolutions urging the state to mandate additional courses for teachers. Across the country I know of relatively few states that are involved in serious discussions about major changes in the certification procedure, let alone about its philosophy. The State of Washington is perhaps the outstanding exception in this regard. This type of resistance rather than resilience in certification does not jibe with the changes any observer can see coming in the schools over the next decade. Resistance to change is not, to use today's key word, innovative. Differentiated functions for staff, new technology for instruction, new or reorganized curriculums, are only some of the changes that compel a re-examination of teacher certification.

Let's look at what is wrong with certification as it now exists. Today certification means prescription by the state, completion of which is offered

to the public as a guarantee against incompetence in the classroom. If that is really the purpose of certification, is the state the best agency to carry out the function? Certainly the state is pretty far removed from the individual teacher whose incompetence is being protected against and a Martian observer could well ask why the decision about competence is not made by someone who knows the teacher.

Even today's approved program approach, which is practiced in some 40 of the 50 states, tends to hold colleges to a state-determined curriculum. In this approved program approach, the state agency grants approval to the higher institution preparing teachers on the basis of an examination of its qualifications including staff, curriculum, library, etc. The state then automatically issues a teaching certificate to persons recommended by that college. No individual examination of transcript is done where this approved program approach is carried out in its best form. But even though James B. Conant was impressed with this approach, he was shrewd enough to see that in most places the college's approved program must follow exactly the courses prescribed for state certification. Such a curricular requirement does not provide the freedom which colleges must have if they are also to be held responsible for the qualifications of the teachers they prepare.

If we are to act on our understanding that adequate education means not only the acquisition of information but the integration of knowledge and skills in a healthy personality, we cannot allow teacher preparation to become a dreary regimen of required courses and prescribed attitudes. We must attract our most sensitive and adaptive people to the profession of teaching, and by giving them realistic knowledge to support their intuitions we must prepare them to make a creative intervention in the lives of the individuals who sit in their classrooms.

A sidelight on this issue is appropriate. Even when colleges are reminded of their freedom to experiment with new curriculums for teachers, they appear reluctant to do so. Colleges frequently talk rebelliously about the choking effects of state requirements but few of them ever propose and justify significant departures. Indeed, the whole thrust of a New York State project with five outstanding institutions in the State was to make it financially possible for the institutions to develop curriculum without regard to inhibiting state requirements. Most of the foundation and legislative money went to release faculty time for campus-wide consideration of teacher education programs. Over a three year period, most of the curriculums appear to be only slightly different from those that follow state requirements. There were gains, of course, from the all-institution involvement in teacher preparation.

The major problem with using curriculum as a basis for certification is that it doesn't tell you how a teacher works with children. It focuses attention on the past with the assumption that completion of a uniform pattern of courses is a predictor of future performance in any classroom. College preparation can't take into account where the certified beginning teacher is going to work. It cannot possibly prepare the beginning teacher for the specific assignment. It must be general in its approach and hope that the able teacher will make the modifications that will help her be completely at home in teaching a slum first grade even though her college major was the 19th century romantic poets. This teacher may appear to have more luck if she is assigned to a suburban sixth grade where the class size is small and the children bright and eager. Present certification practice says the same courses will suffice for both situations.

But any judgment about a teacher's failure or success ought to take into

account the nature of the learner. Unfortunately, we give much more honor to teachers who work in communities where kids learn regardless of who teaches them. And we look down at the teacher who is unlucky enough to end up in a class where children are uninterested in formal learning. In these two extreme cases of the first grade ghetto school and the suburban sixth grade, success or failure probably has very little relationship to certification and preparation. Success might very well be determined by the kind of help provided on the job by supervisory personnel and the kind of human understanding that comes from a combination of teaching, introspection, and personal experience.

We can now issue a permanent certificate to a teacher who has never taught. It is the same certificate possessed by the experienced teacher who can handle the wide range of activities and youngsters in a normal class. It would make more sense not only to hold off certification for the novice but indeed provide a junior level entry position where only a limited amount of training would qualify a person. We might leave much of the more demanding training for career teaching to take place after the first few years on the job. It makes more economic sense also to postpone and make more functional the expensive advanced training for teachers who will stay in the profession rather than spend precious college years trying to develop technical skills for teachers, half of whom drop out at the end of two years.

In New York we have gone through an era of jacking up the academic requirements so that they are more acceptable to persons of a scholarly bent. We have managed nicely to avoid the nagging criticism that the teacher's academic scholarship alone doesn't assure successful learning on the part of youngsters. The increase in requirements also neglects the fact that academic subjects in college are not organized for instructional purposes in the elementary and secondary schools. Children, and especially those who have

the least of life's advantages, are seldom as interested in the subject matter as is the teacher who chose to go to college and then elected to study a subject as an adult, reasoned choice.

No one is suggesting that lower subject matter requirements will make for better teachers. But one can certainly ask whether larger doses of even more scholarly subject matter will yield effective teachers who are indeed sensitive respondents to children and creative agents of intellectual and character growth. Certainly if one of the purposes of education is to mold men rather than simply to produce knowledge, we must be seriously interested in preparing teachers who show a concern for the future of man. Hilda Taba remarks that, "There is a need for emphasis on emotional content in curriculum: materials which make an impact on feelings, which generate insight into values, and which permit an analysis of human factors and relationships in events of life." Professor Taba's concluding remark is particularly pertinent to the ghetto school. She says that, "The treatment of such materials for the purpose of altering personal feelings and of cultivating sensitivity requires teaching strategies for which teachers tend to be the least prepared."

So again we are drawn back to the basic problem concerning certification. It relates to input, what's gone into a teacher's preparation. It is not a statement about performance on the job, ability to bring about learning. It is not a statement about output.

In criticizing existing certification I have not referred to the administrative monstrosity and the incongruities that have grown up in most states. All of us in this business have faced the obviously well qualified college graduate who must be held for courses which even the evaluation clerk knows are ridiculous but which legally we are unable to overlook. My classic ex-

ample is the American citizen raised in France and completing a teacher preparation program there. She majored in history. When she also applied to us for a certificate to teach her native language of French we could not issue a certificate because she had so few college courses in the language.

We have been unable to develop proficiency examinations which are comprehensive enough to test out the varieties of skills and competencies a potential teacher must offer to the schools. Even if we were able to do so, our assessment would still reflect the assumption that a fixed amount of input will surely produce an effective teacher.

Those of us who manage an office concerned with certification shudder at the prospect of continuing the same pattern of certification by course description when we see the staffing patterns in the schools beginning to yield to the fixed notions of the past. Schools are developing bona fide job descriptions and titles faster than we can print new certificates. A whole new hierarchy of teachers serving differentiated functions will develop even faster with the implementation of the Education Professions Development Act. Several variations in staffing patterns have been proposed which will highlight the critical need to modify certification procedures. A leader in this regard, Dwight Allen, became a Dean in your state only a month ago. A particularly interesting suggested staffing pattern was recently authored by Bernard McKenna of San Francisco State College. His differentiation among staff is based on how they interact with students rather than on their management of subject or classroom.

New York State recently adopted a new certification requirement which we lovingly call the "non-certificate." It is a piece of paper that is issued to persons holding jobs in the schools for which no certification presently exists. The basic requirement is a recommendation by the superintendent to issue a certificate and a job description to show that no present certificate is appropriate. We have, for instance, serving in the schools, a media specialist, a per-

son trained at a bona fide school of communication arts and prepared to work in the schools not as a classroom teacher, not with all the understanding of methods and student teaching, but prepared to develop media to serve the classroom teacher. Certainly, this person is an educator in the best sense of the word, but at present there are no certification requirements for him. Some schools have developed a home-school liaison person, or an integration specialist, or a host of other titles, some administrative and some instructional but none of which at present can we handle under existing requirements. As a stop-gap measure, we instituted the non-certificate certificate.

I have avoided, for obvious reasons, criticizing certification delay in processing credentials, a problem which plagues almost every state. This delay is typically a problem of organization, management, or insufficient staffing. It is not philosophically a sound reason for changing certification procedures although it is the one most applicants offer when they get abusive.

What Ought We To Be Doing?

For my sake, and maybe for yours, it would be easier to stop with these criticisms of certification rather than to suggest what we ought to be doing. But the nature of the criticism suggests some alternative approaches.

Certification is, after all, a restrictive device. Its purpose and philosophy is to keep people out with certain exceptions. It represents the profession's walls that guard against invasion by the dilettante. In light of the manpower shortages which we have experienced for at least two decades and can expect to be involved in for decades to come, perhaps the state's principal effort should be on attracting people into teaching rather than keeping them out. Maybe a state agency should be concerned with job satisfactions, with more realistic pre-teaching experiences, with substitutes for the intellectual satisfactions which are missing in slum schools, with other rewards for teach-

ing. Robert Schaefer, the Dean of Columbia University's Teachers College, says, "The basic fact is our ignorance; we simply don't know how to entice the elusive intellects of lower class children, let alone how to achieve the mastery of abstract knowledge and analytical skills modern society demands." This criticism is pointed particularly at the slum school but it is no less sharp when applied to other schools. The devastatingly correct admission of ignorance should remind all of us that mandating one course in cultural anthropology and one in reading isn't going to solve much.

It will take a bold move to crack the safe of certification in which the family rhinestones have been kept for many years. The strongbox of certification is guarded not simply by the state but by the profession itself. No weak assault will suffice. A bold design is called for. There are probably two agencies which, with some help from the state, could transform this licensing function into something more meaningful, something more realistic. The two agencies, of course, are the college and the public schools.

Let me talk briefly about the role I see for each of these agencies and the coordinative role which might be appropriate for the state agency. For a closing number I will answer the question "Where do we begin tomorrow?". But let's talk in broader terms at first.

College's Role

The college's role today is still one of providing the best possible general and specialized education that it can for teachers as well as for others. The state approval of the college program could take into account a number of key items. Certainly one would look at the staff to determine whether or not it appeared to have sound preparation and whether it was a productive staff with an appropriate teaching load. One would look also at the library and other physical resources. One could look at the nature of the all-institutional involvement in planning programs for preparing future teachers. The approval agen-

cy could ask for a list of the performance behaviors which students of teaching were expected to master or a list of the models to which students would be exposed and the types of experiences that would be provided in order to develop a desired performance behavior. In approving a program one could ask how individual differences among teachers would be accommodated and how the feedback from graduates would alter the program for the future.

Students learn best when they perceive the immediate relevance of course material to their own experiences. Instruction in teaching methods must show teachers how to suggest such relevance and artfully to instill subject matter into the students' perceptions. What teachers need in addition to a knowledge of subject matter is the capacity to intervene creatively in students' lives and to provide them with ways of understanding and contending with reality. Such capacity is first of all dependent on the teachers' sympathetic understanding of the ways in which individuals different from themselves view and feel their experiences.

How the college bridges the theory-practice gap remains a puzzler. So little of what university research reveals shows up in classrooms. One is reminded that research results in education are most often reported by the theoretician who is distant from classroom responsibilities. What of the analogy with medicine's clinical researcher--the practitioner-professor who gathers evidence from daily patients but devotes precious time also to the research for which this evidence is the prime input. Is there need for his counterpart in education?

The School

Ultimately the agency to decide on teacher performance for licensing purposes would be the school. This decision would be reached by teachers and administrators working through some approved form of cooperation. Perhaps the

college graduate would be issued an interim certificate good for service under a lightened load for a limited period of time and during which time performance would be assessed locally. In proposing this responsibility for the public schools, I hasten to add that the school and its staff must be given the resources necessary to carry out the new responsibility. This includes a different load arrangement; it means that some teacher's function will be that of "teacher trainer" rather than simply classroom instructor of children. Administrators will need help in learning how to evaluate teachers in situational and in behavioral terms. Neither the school nor the college will be able to avoid the clear responsibility for judging personal characteristics appropriate for teaching. Yet such judgments must not simply perpetuate the stereotypes of the past. Many of us are familiar with the principal whose determination about a teacher's effectiveness is made in terms of her conformance to his standards of silence, order and compliance. Many schools, for instance, still will not employ young male teachers who are not clean shaven and shortly shorn no matter what other saintly qualities they may demonstrate. With this new responsibility for judging the adequacy of beginning teachers, one is forced to change the opinion of the school simply as an educational dispensary. Dean Schaefer calls this view "apothecary shops charged with the distribution of information and skills useful for social, vocational, and intellectual purposes." The present teaching load leaves no time for persons who wish to reflect seriously about their own teaching, let alone about someone else's teaching, or to seek systematic means for improving their performance on the basis of known research. The sheer pressure of the apothecary shop in doling out information, attending conferences, faculty meetings, doing lunchroom duty, maintaining records, etc. makes it impossible for the school to be organized as a true center of inquiry. There is some hope with the increased

use of auxiliary personnel that changes can be made.

The State's Role

In addition to working out the details of the licensing plan, that is, a preliminary certificate for the intern or assistant teacher and then a subsequent level of certification, the state would provide help to local schools in developing assessment devices and ways to use them. It would do this through its own resources and through the employment of specialized talent from a variety of sources including colleges and universities, regional laboratories, research and development centers and educational industries. The state would approve the college programs of teacher preparation. It would support experimentation with the development of assessment tools that may make it possible to predict success in teaching from a simulated trial. These techniques would be based on what a person can do rather than on what courses he had taken.

The state would continue to be the processor and repository of records so that as teachers move from place to place they might be assured of a central record-keeping source. One must remember that even under this new licensing arrangement, having a credential would not be a guarantee of future employment any more than it is at present. It is entirely likely that an individual who was recommended for certification by a local district and therefore issued a state certificate might be unable to secure a job in another school district simply because that district does not find that his talents complement those of the existing staff in light of the student population.

In this wild dream of the future, teacher personnel records would be computerized and information would be gathered for periodic reports that furnish schools with lists of qualified and available personnel, and notify candidates of the need to move from one level of certification to another. Computerized processing will also yield supply and demand figures for colleges planning new

programs. The necessary teacher personnel information would be available "on line" for any employing officer who wished to know about a candidate. The state's role in this regard then would not be to make judgments but rather to maintain records of local judgments in the most highly useful fashion possible.

*

*

*

Back some time ago I promised to say "Where Do You Begin Tomorrow?", if you accept the principle that a decision about a teaching license should be made by persons and agencies close to the teacher. Let me identify some beginning jobs that might be done.

1. It is unlikely that the talent necessary to develop a plan for implementation of a new certification is available at present in any state agency in the country or indeed in any single higher institution. But key people in a number of states and institutions could be employed as consultants whose job would be to draft for state approval a detailed plan of implementation for the proposed approach to certification. The group could be charged with monitoring the plan for at least the first two years of operation and making pertinent modifications.

2. It would be appropriate to authorize development of a teacher education unit within the state agency having approval powers over collegiate programs that prepare teachers. A small staff of highly competent and experienced persons could be provided with funds to employ short-term specialists to assist in making the evaluation of college programs. The staff would develop criteria in a narrowly focused field. Despite new and improved standards for accrediting under the National Commission on Accreditation in Teacher Education, a non-legal body leaves certain gaps for the administration of a statewide program of

certification. Accrediting agencies are voluntary affiliations of institutions responsible to themselves. A state agency does not, and indeed should not, control the question such agencies ask about teaching preparation or teacher success. The state need not develop a parallel or competing accrediting function but it should maintain a very fine probing tool that would use the information available from regional or national accrediting agencies and in addition would seek answers to questions that develop as a result of the school's experience with newly prepared teachers.

3. Until such time as performance standards are developed and tried out, certification or licensure could be granted solely on the recommendation of an approved higher institution. Transients who were not a graduate of a particular institution could apply to a state approved institution and be evaluated for a certificate. This evaluation would be based on more than an analysis of credentials. It would involve at least an interview and perhaps a real or simulated classroom test. By cost analysis of this evaluation task, the state could determine an equitable per capita fee to be paid to the college for the service. Certainly a shift in state costs could be envisioned by its abandonment of administrative practices in evaluating credentials and this amount could be properly allocated to higher institutions making the certification decisions.

4. College evaluation as the only means to a certificate is an interim step. Four or five school pilot districts should develop, with state financial and moral support, assessment instruments and procedures for determining the adequacy of beginning teachers. Undoubtedly, outside advice would be needed and an evaluation of the results would be appropriate. The determinations that were made would need to be judged not only for their efficacy, i.e., do they really tell you whether the teacher is responsible for the children's learning but also for the degree to which the judgment could be generalized for use in

other situations. In these four or five trials, the state would need to supply inservice help for administrators making judgments and help also for beginning teachers who had responsibilities in the induction process. It is unlikely that a successful performance certification scheme can be developed unless recognition is made of the added load it would create on the schools.

5. Over a five year period the state might aim to develop a licensing arrangement that included an affirmation of the prospective teacher's general and specialized education from the higher institution together with a preliminary estimate of teaching potential. The college graduate would receive a certificate as an assistant teacher. A final licensure would be based on verification of classroom performance by a school district using state approved (but not uniform) techniques. The school would recommend issuance of a license labeled staff teacher or some similar designation. Subsequent levels of competence based on combinations of training and performance could well be identified by professional groups and the administration of such levels might be worked into the state's record-keeping function so that specialties could be known to inquiring employers.

* * *

Let me make a few remarks in conclusion. No one expects that a speech can provide in detail all the elements of a viable plan for something as complex as professional licensure. The subject, however, has not been seriously considered in its operational detail within the memory of any of those present. The purpose of my remarks is not so much to prescribe a new treatment as it is to provoke deliberate and detailed discussion of workable alternatives to a hopelessly outmoded system that stands astride the schools making necessary change and improvement more difficult than it need be. If

we succeed in adapting teacher preparation and certification to our best contemporary understanding of human character and need, the achievement will be a guarantee of vitality to the entire educational enterprise.

CERTIFICATION AND TEACHER COMPETENCE: REPAIR OR REFORM

Teacher Education and Teacher Certification
Study Advisory Conference
Boston, Massachusetts
February 3, 1968

Roy A. Edelfelt
Senior Associate Secretary
National Commission on
Teacher Education and
Professional Standards

Certification gives a teacher official sanction to practice in his profession. The procedures for certification provide for the setting and applying of specified standards to ensure the competence of teachers. This paper is concerned with the relationship of certification to competence.

I want to develop six ideas, trying to present sufficient evidence and rationale for these positions.

1. The certification of teachers as we presently operate it is incomplete and inadequate.
2. We have passed the era when certification based on college credits reported by paper credentials was adequate.
3. Able people are not attracted to or enticed to stay in teaching by present certification standards and procedures.
4. Certification should distinguish levels of competence, and responsibility for it should be fixed with several agencies and institutions.
5. The profession itself must become more directly responsible for the certification of teacher competence.
6. Certification is only one device for ensuring teacher competence; competence is dependent on a variety of circumstances and conditions other than certification.

Present standards and procedures in teacher certification are inadequate because they do not serve to ensure teaching competence. This is not to say that the standards and procedures have always been inadequate but to say that times and conditions have changed.

For years the major goals in teacher education have included such requirements as four years of preservice preparation; an appropriate balance among study in the liberal arts, specialization in a teaching field, and professional education, including supervised clinical and laboratory experience; better initial and ongoing selection of prospective teachers; and regional and national accreditation of teacher education programs. Although all of these goals have not been met, there have been substantial improvements. But we have learned from experience that much of what was to be assessed through applying these requirements to preservice teacher education is not realistic and that it is not possible to measure teacher performance prior to professional practice.

Most states now require a baccalaureate degree, including professional training, for teacher certification. Well over 90 percent of American teachers have at least a bachelor's degree. But such an achievement does not ensure quality teachers, at least not the quality needed in schools today.

Part of the problem is that too much has been expected of certification. Expecting the college to certify more than satisfactory completion of study and acceptable performance in student teaching is unrealistic. The college can only predict that a graduate is ready to teach. A college degree and an initial certificate do not guarantee ability to perform as a practitioner. Much more is involved in ensuring competent performance as a teacher than attesting to adequate preparation.

In the first place, preservice preparation is only the beginning of es-

establishing and creating teacher competence; job assignment also plays an important part. For example, the teacher who performs competently in a middle-class suburban school may fail in an inner-city school with children who were reared in poverty, and vice versa. A teacher may also succeed or fail depending on the attitude of a principal or the climate of a particular school or school district. Simply establishing that an individual is prepared to teach is only one step in certifying teacher competence.

It seems, therefore, that several other important and related actions need to be considered, within and without the process of certification, to ensure quality teachers in schools.

Parenthetically, I am assuming that whatever standards and procedures are adopted we will keep in mind and provide for the rapid changes that are taking place in the role and job of the teacher.

States which require a higher level or renewal of certification after a few years of service continue to base such certifying on college credits. In-service education in the school district almost never counts. But graduate study may or may not contribute to improving teacher performance, and in any case its impact on performance is never assessed for certification purposes. This state of affairs cannot continue. If not the initial level, at least advanced levels of teacher certification must depend on verification of competence in terms of performance.

Because experience tells us that raising standards at the pre-service level not only attracts people of greater ability but also serves to bring more students into teacher education, it seems safe to hypothesize that raising standards at the in-service level might have a similar effect, but only if other moves are taken concurrently. At the in-service level a teacher needs more motivation and reward to stay in teaching than merely the status of having been certified on the basis of credits completed. He also

needs desirable working conditions, a career pattern, and differentiated levels of compensation. These factors are essential to attract and keep quality teachers. They are also necessary conditions for a setting in which certification can be used to ensure the competent performance of teachers. Few school districts offer all of these recommended conditions; in fact, many provide such poor conditions that the National Commission on Teacher Education and Professional Standards (NCTEPS) has said that "even when clerical and other nonteaching duties are reduced, the teacher still does not have time to plan, analyze, and assess his teaching....Because of lack of time to dream up new and effective strategies for teaching, to find appropriate materials, to check the success of instruction, to get to know the students, to keep in touch with parents and the community, and to evaluate the effectiveness of curriculum, teachers tend to follow the same course of study and pursue the same teaching techniques year in and year out. They turn into robots, and their approaches to teaching become shopworn and routine."¹

Teaching conditions such as these are intolerable and will not attract or hold able and talented staff members. Provisions for and guarantees of better conditions of work must get attention concurrently with action on teacher performance for certification. Teacher morale, motivation and aspiration will not hold up if the job of the teacher is not made more manageable.²

1. National Education Association, National Commission on Teacher Education and Professional Standards. Prospectus (for the Year of the Non-Conference). Washington, D.C.: the Association, 1966, p. 2.

2. See publications of Project: Time To Teach published by the Association of Classroom Teachers, National Education Association: Project: Time To Teach (1966), Problems In Perspective (1965), Problems and Solutions (1966), Time To Teach: What the Local Association Can Do (1966), Innovations for Time To Teach (1966), and Time To Teach Action Report (1966).

New approaches to certification should encourage identifying levels of teacher competence, developing career patterns, and differentiating compensation on the basis of competence and responsibility. There is presently no career pattern in teaching. The beginner and the veteran have essentially the same responsibility, role, status, and compensation. There is no advancement in teaching except promotion out of the classroom. The NCTEPS and several other groups, including the planning committee for the Education Professions Development Act (EPDA) suggest establishing career patterns by differentiating teacher roles, responsibilities, and compensation as a necessary step to advancing the development of the profession. The idea involves recognizing levels of competence, assigning responsibilities in terms of competence, and compensating teachers on different scales, depending on competence and responsibility. Temple City, California, has adopted one system of differentiating roles, competence, responsibility, and compensation.³ A variety of other plans which incorporate most features of this idea are illustrated by the NCTEPS demonstration centers⁴ and some of the I/D/E/A schools.

Professional associations have played and can continue to play an important part in developing and illustrating differentiated teacher roles.⁵ The direction which the NCTEPS has taken to foster development of the teaching profession will be encouraged and expanded under EPDA projects to es-

3. Allen, Dwight W. A Differentiated Staff: Putting Teaching Talent To Work. Occasional Papers/No. 1. Washington, D. C.: National Commission on Teacher Education and Professional Standards, National Education Association, December 1967.

4. National Education Association, National Commission on Teacher Education and Professional Standards. The Teacher and His Staff: Selected Demonstration Centers. St. Paul, Minn.: 3M Education Press, 1967. Copyright 1967 by the National Education Association.

5. Joyce, Bruce, R. The Teacher and His Staff, Man, Media and Machines. Washington, D.C.: National Commission on Teacher Education and Professional Standards, National Education Association, 1967; and McKenna, Bernard, School Staffing Patterns. Burlingame: California Teachers Association, 1967.

Edelfelt--6

establish career lines, recognize and reward levels of competence, and differentiate professional and subprofessional roles--all of which will be fundable under EPDA.

When attempts are made within the above framework to establish levels of certification and to base (at least in part) the higher levels of certification on performance, the prospects of ensuring teacher competence become greater. But performance criteria are not easy to establish or apply. Competence will vary in terms of philosophy and teaching assignment. In many ways teacher competence is an individual matter. Its elements can be generalized but they must be applied to individual personalities.

It should be possible to agree on and apply criteria of competence for certification at the school district level. As techniques of analyzing and evaluating teacher behavior become more sophisticated and, as important, as teachers become participants in these processes, it should be possible to establish levels of competence in certification. It is now possible to establish at least two levels--regular teacher and master or career teacher. If the beginning teacher is considered still another level, then there would be three. The school district and professional associations should take increasing responsibility for approving certification as the level goes up and the focus of evaluation sharpens on performance. For example, the school district and professional associations will have a secondary role in approving the initial certificate, as they will be minimally involved. At the career-teacher level, however, the school district and the professional association should have primary roles. The main criteria for career teacher status should be concerned with performance, which the school district and professional association are in the best position to adjudicate.

The particulars of standards and procedures for career teacher certification will need to be worked out at the local district level. The professional

Edelfelt--7

associations and societies can be involved centrally in establishing criteria and procedures for career teacher designation. Policies for both criteria and procedures should be written into collective negotiations agreements.

Teachers stand to benefit from establishing a career teacher classification, but they must also demonstrate professional responsibility in applying standards. Collective negotiations agreements which include policies and procedures for local certification will indeed have struck a bargain. And there will be assurance that such a bargain will be kept because the State Department of Education will serve in an approving capacity, just as it does for all colleges and universities at lower levels of certification. The state's role of approving the agency which grants certification will not be eliminated. It will be made to include both the local school district and the professional association.

Standards of practice (certification) and the safeguards for such standards should be stronger when several agencies (college and universities, school districts, and professional associations) serve to check and balance each other. It will sometimes be desirable to establish new agencies, with representatives from existing agencies, for specific functions in setting or enforcing standards. In this scheme of things the State Department of Education becomes a catalyst, a facilitator, a supporting staff, a responsible administrative agency, and far less a policeman or monitor.

Standards for certification might be set by a legally constituted professional standards board and enforced through a legally established professional practices commission. The State Department of Education could provide staff for both of these new agencies. And these groups would work under the State Board of Education and the chief state school officer in an advisory capacity. It would be expected that most of the recommendations of these new bodies would be accepted by the State Board of Education. This

assumes, of course, that a professional standards board or a professional practices commission will be a responsible body.

The certification of teachers--and all the accompanying dimensions of the effective governance of teaching--is a complicated business. And it should be. Teaching is a complex profession. But it should be possible to establish something much better, particularly in certification through professional associations and societies and more responsibility for the local school district. The state will need to provide funds to make some of the above possible and it must remember that teacher certification is only one device for ensuring teacher competence. If certification is not supported by action on a variety of other related factors, such as the continuous study of education manpower, career line, working conditions, teacher status and compensation, about all that can be accomplished is a tinkering with an inadequate system.

THE EDUCATION LICENSING BOARD OF MASSACHUSETTS

A Proposal for Reconstruction in the Preparation
and Certification of Teachers and Administrators
for the Public Schools of the State

(An address by James D. Koerner to the Advisory Conference on Teacher Education and Certification in Massachusetts by the Massachusetts Advisory Council on Education, Boston University Law Auditorium, February 3, 1968.)

"I want a man to begin," said Montaigne, "with his conclusions. Grammatical subtleties and an ingenious fabric of words won't do." Acting on that admirable advice, I would like to begin with my conclusion: Massachusetts in the foreseeable future will not be able to staff its public schools with the kind of teachers and administrators that we all say we want unless the present machinery of control is changed.

I don't believe, that is, that any amount of tinkering with the existing mechanism for training and licensing school personnel in this state (or any other state) will produce genuine reform. By "the existing mechanism" I mean not only the present certification laws and procedures but the established apparatus which governs the preparation of teachers and administrators in our colleges and universities.

I hasten to add that merely changing the machinery will not of itself solve our problems either. It is simply the inescapable prerequisite to an attack on the fundamental question of how to get and keep good teachers and administrators in large numbers throughout the state within a reasonable length of time.

It is possible, to be sure, for the Advisory Council's study of teacher education and certification and for the study committee to come up with recommendations that can be carried out within the existing structure of control and

that would bring much-needed improvements. We could, for example, raise course requirements for certification beyond their present ludicrous levels; we could endorse the idea of state approval of training programs; we could plump for better practice teaching. We could do these and many similar good deeds and certainly should do them if we are unable to do anything else. But I don't believe that any of them, or all of them together, would assure the schools of the state the kinds of teachers and administrators that are needed now, to say nothing of the future.

That infinitely complex job can only be done, if indeed it can be done at all, through the creation of some new instrumentality of control. Such an instrumentality might take any number of forms and no one is in a position to say what the ideal would be or if there is one. But I would like to discuss with you the possibilities of a policy-making body different from anything that now exists. For want of a better name, I will call it the Education Licensing Board of Massachusetts.

Before describing this hypothetical entity, let me spend a few minutes talking about the present state of teacher education and why a new method of control is needed. I will try to be brief in covering what is probably old ground for some of you. I will also try to be restrained and dispassionate in dealing with the always inflammatory subject of what is wrong with teacher education; for I feel that the controversy that has been with us for some years ought now to move beyond the purely partisan stage where colorful combat is often carried on for its own sake and serious discussion is blocked by emotion and unreason. At this point, that is, I have a strong desire to leave old battles to history - though not, as Churchill once remarked in Commons, "because I intend to write that history myself." I am content to let others write such histories. But it would be well if we could agree on what it is that is chiefly wrong with the present system before we talk about solutions.

The first thing that's wrong are the state's certification laws, as the Massachusetts Certification Bureau realizes better perhaps than anybody else. The present laws do not protect the public against incompetence. Much less are they an incentive to excellence. Even less are they a guarantee of excellence. Moreover the present laws in Massachusetts and other states are circumvented in a variety of ways, so that some unknown but sizeable percentage of teachers in practically all the states are not certified.

The second problem is the lopsided requirements of the training programs themselves. Most of our colleges and universities go far beyond anything the state demands in the way of course credits in education, thereby introducing an imbalance between academic and professional work. If you are in any doubt about this imbalance, let me direct your attention to Chapter 17 of the Willis-Harrington report. It has never been clear to me why so many people in teacher education look only to a change in certification laws or to other action by the states to improve teacher education. It is the preparing institutions themselves that bear a great part of the responsibility for the present situation. Thus I find it hard to get excited about the so-called "approved program approach" to licensing teachers.

But wholly apart from arithmetical considerations - the courses and hours and units and credits that are taken or not taken by teachers - the much more important fact is that too many teachers continue to come out of training programs poorly prepared for their jobs, whatever the reasons, and are fully licensed by the state. The simple but fundamental fact remains that too many elementary teachers emerge from their undergraduate degrees badly educated, with a potpourri of unrelated, unsequential courses in the liberal arts concentrated pretty much in the first two years of college and with vast areas of human knowledge untouched; with an accumulation of

repetitious course work in theoretical pedagogy in the last two years; and with practice teaching of highly uncertain quality.

Too many secondary teachers, whatever the reasons, come out of their preparatory training unqualified to teach even their major subject, to say nothing of their minor subject, if any, or still other subjects to which they may be misassigned by their administrators. The latest figure to come my way is from the state of Iowa, which has had detailed certification laws for a long time, but which recently found that less than one-third of new high school teachers in the state had a college major in the subject they were teaching. In Massachusetts I don't know how much misassignment there is, but I would hazard a guess that it is high even though our licensing standards are low. I also remember a survey that Neal Gross did some years ago of school superintendents in Massachusetts in which he found them listing as their second biggest problem (money was the first problem, of course) the inability of teachers.

Still another big problem, often ignored in discussions of teacher education, is in the graduate school of education. The imbalance between the academic and professional study that is common to undergraduate teacher training programs is far worse at the graduate level, especially in programs for school administrators. This imbalance would not be a problem except for the sheer weight of numbers of administrators in any other country of the world - and the degree of control they exercise over teachers, over the curriculum, and over many other fundamental matters. The peculiar role that administrators play in our educational system makes their education in turn a matter of pre-eminent concern.

What is wrong with it? The main thing wrong with the customary graduate school program in school administration is, quite simply, its intellectual

isolationism. It is wholly concentrated in the school and the faculty of education, just as though the study of economics, politics, history, language and literature, industrial management, public administration, and science and technology - just as though all this had nothing to do with the training of people who want to run the most important institutions of our society. Instead their preparation takes the form of courses in the school of education that are often fragmented, inflated, and pretentious, without a theoretical base or research technique of proven efficacy. Whenever I contemplate the course requirements for the doctorate in education, I can't help remembering Hildebrand's Law, formulated by Joel Hildebrand, a distinguished professor, chemist, and administrator at the University of California at Berkeley:

"The number of courses offered by an academic department is inversely proportional to the intellectual distinction of the faculty and the amount of basic knowledge in the field." Many academic departments, I regret to say, demonstrate the validity of Hildebrand's Law, but the graduate school of education leads all the rest.

I did promise to be both brief and dispassionate, though some of you may feel that I have been neither, in this review of what is wrong and why it needs changing. So let's leave the subject by saying that at least we all agree that changes are needed in the education and certification of school personnel in Massachusetts. If you don't go that far with me, you presumably would have to say that the Willis-Harrington Commission was wrong in its findings; that the teacher education study of the Advisory Council on Education is unnecessary; that the millions of dollars pumped by the National Science Foundation into the retraining of people already certified and teaching were wasted; that the money put into the search for new ideas in teacher education by the Ford Foundation and many other groups has been misdirected;

and that all of those people all around the country who are convinced that reform is essential are misinformed or malicious. So let's assume that we all believe serious deficiencies exist and remedial action is required. Let's also acknowledge that the problems, whatever impression my remarks may have given you so far, are not simple or single in origin or solution, that nobody has a magic wand with which to cure all the ills that we are heir to.

Let us then go on to a matter where there may be a substantial measure of disagreement. I believe that if the past proves anything about teacher education, it is that reforms of the scope now needed cannot and will not be made from the inside. They will not come as long as policy-making power is as narrowly concentrated as it is. Anyone who thinks differently ought to ask himself how many of the changes that have been made in teacher education in, say, the last quarter century (and at best there have not been many) have come from inside the industry.

Or he might take a look at current documents that represent the collective views of the professional establishment about how to improve teacher education. He might look, for example, at the document produced by the Office of Education called Proposed Standards for State Approval of Teacher Education. Or at such publications of AACTE as its Standards and Evaluative Criteria for the Accreditation of Teacher Education. Or at the Phi Delta Kappa compilation called Improving Teacher Education in the United States, published last year, in which a number of forward thinkers from the industry discuss what to them would be a brave new world in teacher education. I don't mean to denigrate these efforts, and indeed I would support some of the positions taken, but the fact is that the kind of change welcomed in these documents is the kind of tame meliorism that one should expect of any field not in an advanced stage of decay. It is clear that the teacher-training

industry welcomes change if it makes no waves, rocks no boats, usurps no power, unseats no sovereigns, undermines no empires, threatens no financial or professional interests. By all means let there be change, says the establishment, provided it is we who decide the changes.

I may seem to you to be caricaturing the real situation, but I am honestly convinced that the greatest problems in teacher education and certification are created and sustained by a system of control that lacks checks and balances and that has plainly demonstrated an incapacity to reform itself.

What I am saying is that the big decisions about how teachers and administrators are trained and licensed are now reposed to far too great a degree in the hands of professional educators, who after all represent only one segment of the educational community, not to say the public interest. The term, "professional educator," by the way, continues to mislead laymen, who naturally assume that it encompasses anybody whose "profession" is "education" (such as school teachers and college professors) and do not realize that it is usually restricted to people whose profession is in the study or administration of education. The term "educationist" or "educationalist," which is more accurate for the latter group and a perfectly good term in other countries, seems to be resented in the United States. To keep the peace, therefore, along with the ambiguity, I will stick with the term "professional educator."

The issue of control in teacher education is not complicated. If you believe that an important body of knowledge of proven power exists about how to educate and license teachers and administrators, and that professional educators are in possession of this knowledge while most other people are not, you may want to assign professional educators a dominant voice in the control of training and licensing. If along with me you don't believe that such a body of knowledge exists, or if it does that it is not extensive,

codified, esoteric, or possessable only through lengthy specialized study, you will, I hope, want to see control more broadly based and more representative.

Either way - whichever of these beliefs is yours - you and I might still agree that a number of groups in our society have a major stake in the setting of institutional requirements for training, in the establishment of state licensing laws, and in other basic policies. You might, that is, share my belief that teacher training and certification are simply too big and important to be monopolistically controlled. You might also agree that monopolies by definition are dangerous and need to be curbed, even though you and I might not set about trust-busting in the same way.

What voice, for example, do classroom teachers have in teacher education and certification? None whatever. Yet it must be obvious that the views of able and experienced teachers on a great many aspects of the education of a teacher are at least as valuable as those of administrators or members of the education faculty who may not have taught in a school for a decade or two if ever. I have never understood why the people who run teacher-training programs or establish certification standards fail to give experienced teachers a role in policy deliberations.

It may be that one reason for their failure is that experienced teachers are usually critical of the status quo in teacher education. They manage most of the time to restrain their enthusiasm for certification standards and the teacher-training programs they themselves went through. All attempts that I have ever seen, including some of my own, to find out what teachers think about teacher education - all attempts, that is, that guarantee teachers anonymity or protection from reprisal - bring in results that are as consistent as they are critical. One of the more recent examples is a series of reports produced over the last few years by committees of the California legislature

on the results of that state's famed Fisher Act which in 1961 overhauled the licensing of teachers. One of these studies, called Let Us Teach, is based on a questionnaire returned by no fewer than 16,000 teachers in California, and I would commend it to the attention of anyone curious about the opinions of such a large number of teachers on their own preparation and on a number of related matters. The Factfinding Committee on Governmental Administration of the California Senate, which published the report, was moved at one point in it to say: "It is shocking that these views [] of California teachers [] seem to be obtainable only under the shelter of anonymity as was provided by these questionnaires."

Unless I badly misread the signs these days, teachers are going to demand and get a much larger voice than they now have in teacher education and certification. They are also going to demand and get a much larger voice in other educational matters on which they have rarely been consulted in the past. No matter what we do here or what the results of the Advisory Council's study, it seems clear to me that Massachusetts teachers are going to have something to say in the future about their own training and about licensing. I for one look forward to the change. But I would also admit that my many hopes in this matter are conditioned by a few fears. My main fear is that teachers will subordinate excellence in training and licensing to the predominate concerns of their professional organizations with salaries. My main hope is that they will find a way to harmonize both objectives.

Another group with a big stake but no voice in the education of teachers and administrators is the people who hire and pay them - the laymen, currently over 100,000 of them, who serve on school boards and provide a living for over two million teachers and administrators. Again it has always seemed odd to me that the people who must evaluate and employ in such large numbers those who come out of educational training programs should have no voice in these

programs or in licensing requirements. Nor is there even provision for feedback from employers of school personnel to training institutions.

Still another group that has been disfranchised in the government of teacher education is the faculty of arts and sciences in our colleges and universities. The liberal arts departments in a given institution may have some control over students in that institution who are preparing to teach academic subjects at the secondary level, but their control may well be limited to the setting of majors and minors. In many institutions, probably most, they have nothing to say about the rest of the education their prospective teachers receive, nothing to say about general policy in teacher education, nothing to say about the preparation of elementary school teachers, nothing at all to say about the education of school administrators, and nothing whatever to say about state certification requirements.

The "all-institutional" approach to teacher education may work reasonably well in some liberal arts colleges and a few universities, but it is mere window dressing in many other institutions and non-existent in many more. Neither through their individual institutions nor through their professional associations do the people who know the most about the subjects that make up the bulk of the school curriculum - English, history, foreign languages, mathematics, biology, chemistry, and physics - enjoy any significant policy-making functions in teacher education and licensing.

Fortunately this situation is also beginning to change. The curriculum reform movement that began in 1951 with Max Beberman and his mathematics group at the University of Illinois and in 1956 with MIT's Physical Science Study Committee has expanded beyond anything that could have been imagined a decade ago. Major reform work is now going forward in almost all of the basic school subjects through the collaboration of outstanding scholars and classroom teachers. The result has been a revitalization of large parts of the

curriculum and the re-involvement of the academic community, at least as part of it, in public school affairs.

So far the influence of the curriculum reform groups on teacher education has been confined to in-service institutes of great variety and differing quality. Not much headway has yet been made in pre-service programs and none whatever in certification standards. However, it seems a safe prediction that the influence of this movement on regular teacher-training programs will soon begin to grow. Even more important is the fact that there now exists a large nucleus of first-rate scholars who have a lasting interest in, and an extensive experience with, public education. They might well be the group through which the voice of the academic community can be re-established in teacher education and certification, especially in Massachusetts where so much curriculum reform work has been done.

Still, this broadening of participation in the control of teacher education on the part of relatively few scholars and teachers is quite isolated. It is sporadic, not organized, and certainly not nation-wide or even state-wide.

I would ask you, then, to speculate with me about what sort of body could be created in Massachusetts to generate and sustain reform in the training and licensing of teachers and administrators. How can we prevent the monopolization of power by one interest group? How can we bring disfranchised groups into some kind of federation that will preserve a balance of powers? How can we create an instrumentality that will reassert state leadership and at the same time be able to adjust continuously to rapidly changing educational conditions - including conditions that at some point in the future might call for its own disestablishment?

It might be done in a dozen different ways. The State Board of Education

could possibly begin to exercise the authority given it over teacher education and certification by the Willis-Harrington Act. It might, for example, put some advisory committees to work that are representative of the major interests involved in teacher education and might try to change our licensing laws on the basis of their recommendations. But the State Board is very busy on other fronts and will probably continue to be for some time. Even if it were able to give the problem some concentrated attention, it would not be able to give teacher education and certification the kind of long-term continuous attention it needs.

Or conceivably the State Department of Education could organize some sort of broadly based group and charge it with preparing a reform plan in teacher education and certification that the Commissioner might then try to sell to the State Board or to the Legislature. But educational organizations are rarely good at introspective analysis, and educators with a large stake in established procedures that they themselves helped to create over the years are no more likely than businessmen or politicians or labor unions to be enthusiastic about changing the rules. State departments of education, perhaps in the nature of things, are not often found in the vanguard of educational reform.

Although neither I nor anybody else knows what the best way might be of solving the multitudinous problems of teacher education, I hope you will consider one that seems promising to me. Let me describe it in rough outline only. I want, that is, to talk, not about the reform of teacher education or certification, but about creating a means for generating reform. The Willis-Harrington Commission decided early in its deliberations that it could not spell out all the reforms needed in Massachusetts education - that such a job was too big and complex for the time and money available to the Commission. Instead it wisely decided to address itself to the problem

of how to create a system of control in the state that in turn would identify and institute the reforms needed. Perhaps we are at the same point in teacher education and certification. So I now want to talk with you about means rather than ends.

Suppose the Legislature were to establish a new state authority - call it The Education Licensing Board of Massachusetts. Suppose we put it under the State Board of Education, as I have indicated on the diagram appended to this paper, but give it full authority over the certification of school personnel. Suppose that is, we interposed it, between the State Board and the Department of Education, whose Certification Bureau would continue its customary administrative functions. I see no contradiction in a body that is independent but under the State Board. There is legislative language that covers the matter: the State Board itself is "in but not under" the Department of Education. The Licensing Board that I am proposing could be "in but not under" the State Board. I want to stress its freedom, for a body that was merely advisory would probably not work in Massachusetts, any more than advisory bodies now in existence in other states are effective in the reform of teacher education and certification.

The Massachusetts Licensing Board might be made up of, say, fifteen persons drawn from the ranks of three groups: (1) experienced classroom teachers; (2) outstanding members of college and university faculties - whether professional educators, or scholars and academicians with a demonstrated interest in public education; and (3) distinguished laymen drawn possibly from local school boards. The board might also have ex officio or other kinds of representation but the three groups I have named would constitute the major part of the board. There would be no spokesmen for teacher-training programs or for the teacher education industry as such, any more than local school districts are represented as such on the State Board of Education.

Nor would academic subjects or fields as such be represented. The membership, in other words, would be made up of outstanding persons whose distinction happens to be in certain fields or endeavors and who share a devotion to education. But no one would be there as a spokesman for his speciality. Such a board would, I believe, bring into the governing of teacher education and certification a balance of powers that is not possible in the present system.

How board membership was determined would be the quintessential problem for the board's success would obviously turn on the kinds of people serving on it. How do we avoid electing or appointing teachers to such a board who may be excellent in the classroom and known throughout the state but who are interested only in the narrower aspects of teacher power? How do we avoid getting professional educators who are hostile to the whole enterprise and want either to control or neutralize the board's authority? How do we avoid academics who think only in terms of their subject or who know little about public education? How do we avoid laymen who are known and respected by everybody but who serve on the board only to become still better known and respected? I don't know. But I am confident that the problem is soluble if the idea of the board itself is acceptable.

It may be that the Legislature would decide to control appointments to the board, with, one hopes, the obvious safeguards against purely political appointments. Or the Governor might appoint the members from lists of people submitted to him by, say, the Advisory Council. The Council in turn might confer with the appropriate professional and scholarly state and national groups. Possibly some appointments could be made from the Massachusetts members of such prestigious bodies as the National Academy of Sciences or the American Philosophical Society. In any case, I am confident that the problem of selection could be solved if it were recognized

from the beginning as critical.

If such a board were brought into existence, one of the first decisions it might make was that it was not able by itself to establish detailed regulations for the licensing of many different kinds of teachers and administrators. No one should underestimate the complexity of the issues with which the board would have to deal or the difficulties that any single body would face in reconstructing the state's system of training and licensing school personnel.

Suppose the board, in its becoming modesty, decided to create under itself a series of units that I will arbitrarily call panels, which would advise the board on detailed regulations. There might be a panel, for example, for each of the principal subjects of the school curriculum or for related groups of subjects. There might be a history panel, a mathematics panel, a foreign languages panel, etc. The panels might be made up of five or seven or nine persons divided between scholars and classroom teachers of the subjects involved. The panels might have only advisory authority but one's strong expectation would be that the board would follow their advice; possibly their authority could be more than advisory.

The job of the panels, quite simply, would be to keep the board continuously apprised of training and licensing needs in their subject. They would need to stay abreast of the supply-demand situation in their subject; they would have to worry about misassignment; they would have to decide how teachers of their subject should be licensed by the state. Obviously these panels would not move in splendid isolation of one another or of the training institutions themselves, but they might come up with anything but homogeneous requirements. Standards, that is, might easily differ from subject to subject.

Let's consider for a moment how one of the panels might operate. Sup-

pose we take for illustration a universal subject, say English. The Licensing Board talks to such bodies as the Massachusetts branch of the National Council of Teachers of English and perhaps to the Modern Language Association, as well as to anybody else whose opinions it values in the matter, and winds up appointing or having appointed a panel of seven people for high school English: four scholars who have evidenced their interest in and knowledge of public education and who perhaps have been involved in curriculum reform, and three outstanding teachers of English from the schools.

The panel meets and decides that before it makes recommendations to the Licensing Board it would like to find out who now teaches English in Massachusetts schools. It puts the data processing equipment of the Department of Education to work and discovers to its horror that half the people teaching high school English in the state's public schools have neither a major nor any other significant preparation in the subject. (Let me in passing remind you that our present licensing laws state that "A secondary school teacher may not devote more than 50 percent of teaching time to subjects in which he or she is not qualified to teach as a major." Since a teacher is "qualified" in Massachusetts with eighteen semester hours, the regulation means that he can spend half of his time teaching physics, or mathematics, for example, in our high schools if he has had nine semester hours in that subject - and that's nine hours from any college under any instructor at any time in the past.)

The panel also discovers that there is really no way, anyhow, of evaluating, equating, or comparing the paper credits of one teacher with another because of the multiplicity of preparing institutions, programs, and standards. The panel decides that it really can't assume that six credit hours in "English Literature of the Seventeenth Century" taken at an impoverished

state college under a professor who himself has a master's degree in Twentieth Century American Literature from a minor institution in the South is entirely equal to a year of work in that subject from, say, Harvard's Douglas Bush.

But it's an imperfect world and our anguished panel decides to be both realistic and bold. It regretfully decides that it can't for the present escape the quantitative trap and decides to continue to license English teachers on the basis of degree data. Conceivably it might not decide that; it might find a new procedure entirely. But let's say it decides that the minimum for full licensing hereafter will be a substantial major of perhaps forty semester hours that includes work in certain areas of the subject it knows are needed by teachers.

It finds that most of the English departments around the state approve of its recommendations and are anxious to cooperate; they know the deficiencies but have been busy frying other fish. The panel would like to experiment with a two-level system of licensure for English teachers tied to an advanced degree that is approved by the Licensing Board or perhaps to a combination of advanced work and a record of proven accomplishment in teaching. But it doubts that teachers organizations in their present state of evolution are ready to buy such a plan, and decides to work quietly behind the scenes for a while and see if professional support can be crystallized around that or a better idea.

Meanwhile it takes care to avoid substituting new rigidities for old. It recognizes that many communities in Massachusetts might be lucky enough to have people in residence who have distinguished themselves in literature, journalism, or other kinds of writing but who might never have sat in a college English class, not to say an education class. Or there might be in residence a number of former teachers from private schools or from foreign countries or from institutions of higher education. The panel therefore says that it

stands ready to license anybody on the basis of achievement in the subject and hopes that the schools of the state will make an effort to lure people into their classrooms either full-time or part-time who might not fit neatly into the customary mold. It might even say that it stands ready to license anybody on the basis of examination or other criteria even though they may never have taught; it might, that is, decide to license people sometimes on the basis of faith, as is often the case now with fully certified teachers.

Reminded, perhaps by the lay members of the Licensing Board, of some harsh facts of economics and manpower supply, the panel for English also recognizes that the English classrooms of the state's high schools will not all be filled with teachers of the required background and ability in a short time, and makes the appropriate adjustments in its recommendations to the Licensing Board about emergency measures. But it holds firm to its basic position that no new teachers will be fully licensed without meeting the panel's established standards.

Other panels might behave in quite different ways. In subjects where a teacher's knowledge and technique are more or less measurable, at least for purposes of maintaining a definable qualitative standard, the panels might well decide to include examinations in their licensing procedure. The panel for foreign languages might, as I would hope, require a written and oral examination for licensing; for that indeed is the common sense requirement that has been supported for a long time by the Massachusetts Foreign Languages Association, an agency that, one hopes, would be represented on the foreign languages panel. The mathematics panel might decide that some concrete demonstration of a teacher's grasp of mathematics is essential for licensing. The panels in science might require laboratory demonstrations or other evidence of ability. The social studies panel, if there were one, might decide...

God knows what.

The chief virtue of these panels is, quite simply, that they provide the Licensing Board with a means whereby continuous attention can be given to teacher preparation and certification in each subject by a body of people that brings expertise, practical experience, and advanced scholarship to the task.

The Licensing Board might reserve certain specialties for its own attention. Rather than have a panel on requirements for elementary school teachers, for instance, it might want to tackle that complicated problem itself.

It might also want to reserve for its own attention the requirements for administrative and non-teaching personnel. In its politic wisdom it might decide to avoid an open battle with NCATE or the ASSA, or with orthodox advanced degree programs of the schools of education. On the other hand, it might decide that such a battle really had to be faced, in which case I for one would loudly applaud.

In any event it might decide, as did a committee of the New York Board of Regents recently, that the ranks of school administrators were too heavy with what it called "coaches and bandmasters." The Regents committee recommended after surveying the state that superintendents in the future have "backgrounds rich in the liberal arts and sciences." This committee even went so far as to recommend that "In unusual cases the school board should consider selecting as Chief Education Officer an experienced leader who has demonstrated administrative and intellectual capacities in endeavors outside education." Our Licensing Board, following the same common sense reasoning, might begin to encourage schools of education to raise up a different sort of school administrator and might even incorporate some of the more obvious qualifications in licensing regulations.

The board would also be a far more flexible means of dealing with special

problems than is the existing machinery. It might, for example, experiment with quite unorthodox methods of getting and keeping good teachers in the inner-city schools, since this problem is not being solved and cannot be solved with orthodox methods. It might be working with New York's new Urban Teacher Corps, for example, to see if some of our own inner-city problems can be solved.

It might try to open up several avenues, or a great many avenues, to the teaching license instead of just one. It might want to promote some experiments in full-time, school-based internships. It might want to make special licensing provisions for veterans of the Peace Corps, VISTA, the Job Corps, the armed services, or for other people with specialized experience. It might want to make special provisions to license scientists, artists, musicians, poets, or anybody else with a record of achievement that local schools might be able to tempt into the classroom.

It might want to think about the possibilities of establishing some kind of senior qualification for teachers of experience and accomplishment - a prestige license that might be based on competitive examinations or on demonstrated accomplishment in teaching or on both; something similar, perhaps, to "board-certified" medical specialists or perhaps to the coveted French status of agrégé. It might want to try yielding full autonomy to train and hire teachers to a few pilot school districts, allowing them to go about staffing their schools in any way they chose. It might try yielding autonomy to selected institutions of higher education to conduct their training programs in any way they chose. Quite possibly it might authorize other kinds of institutions such as the New England Regional Educational Laboratory (better known as Education Development Center) to undertake some teacher-training experiments of their own.

It might also want to put the weight of its influence behind the "new

curricula," and encourage institutions to construct their teacher-training programs so that people coming out of them are able to handle the new courses of study and do not have to be immediately retrained. Or it might undertake to persuade the Office of Education's big new bureau on teacher education that the "innovative" programs which OE says it is looking for do not always and ever have to be found in, or be conducted in, institutions of higher education. Maybe the board could help shake the teacher-training folk of the Office of Education out of what John Stuart Mill once called "the deep slumber of accepted opinion," and persuade them to back, say, a radical school-based or community-based or community-based training program in Roxbury or in a rural area of western Massachusetts.

But, you might say, the plan is full of unanswered questions. What about reciprocity, for instance? What if such a Licensing Board established standards that could not be met by teachers coming from other states? What about the regional or nation-wide reciprocity arrangements already developing with NCATE, or with the New England states, or with the Education Commission of the States?

Or you might ask what the board would do about small rural districts that could not begin to pay enough money to get the kind of teachers or administrators we have been talking about. Or you might ask why anybody should think that such a board would be any better at enforcing whatever standards it enunciated than is the present system.

Or you might ask how the board would cope with such impending challenges as educational technology. Although the great hopes and claims of the last fifteen or twenty years for electronic education have yet to come to fruition, we did hear, you may recall, at the first of these three conferences on education in general and therefore on teacher education. We heard some surprising predictions about what education would be like in 1980 - or was it 1984? - with

teachers who may be ringmasters of a kind, who would no longer need to have much in their heads because it would all be in the computer. If such predictions turn out to be true, you might ask, how would the Licensing Board cope with that apocalyptic revolution.

The answer, of course, is that I don't know how the board would resolve these and lots of other problems. And I don't want to worry about them. I want the board to worry about them. But I am confident that this board or something like it would be a much more effective way of dealing with our problems in teacher education and certification, present and future, than we have now in any of the states. The board is a much more supple instrument, more adaptive than anything that now exists.

To many of you the plan may have one big flaw; it tends to centralize rather than distribute power over teacher education and certification at a time when James Bryant Conant and lots of other people are plumping for what they call "institutional autonomy" or the approved-program approach. I would answer this important objection by reminding you again that the chief reason people are now enamored of institutional autonomy in teacher education is the record of weakness and lack of leadership on the part of the states, and not really the fear of centralized control. It is precisely because the states have failed to exert their authority - have failed to carry out their responsibilities to insure well-qualified staff to the public schools that Conant and others now want to shift these responsibilities to the individual institutions.

But unfortunately the record strongly suggests that institutional autonomy is not going to solve the problems. As I have already pointed out, institutional autonomy is what, in effect, we have had for a great many years; or at least freedom from state domination, though not freedom from national organizations that call themselves "voluntary" groups. Most institutions that pre-

pare teachers and administrators have for a long, long time gone far beyond anything required by the states for certification. They have, in other words, trained school personnel in more or less the way they wanted to train them. Rarely have they been frustrated, and even more rarely hamstrung, by state laws.

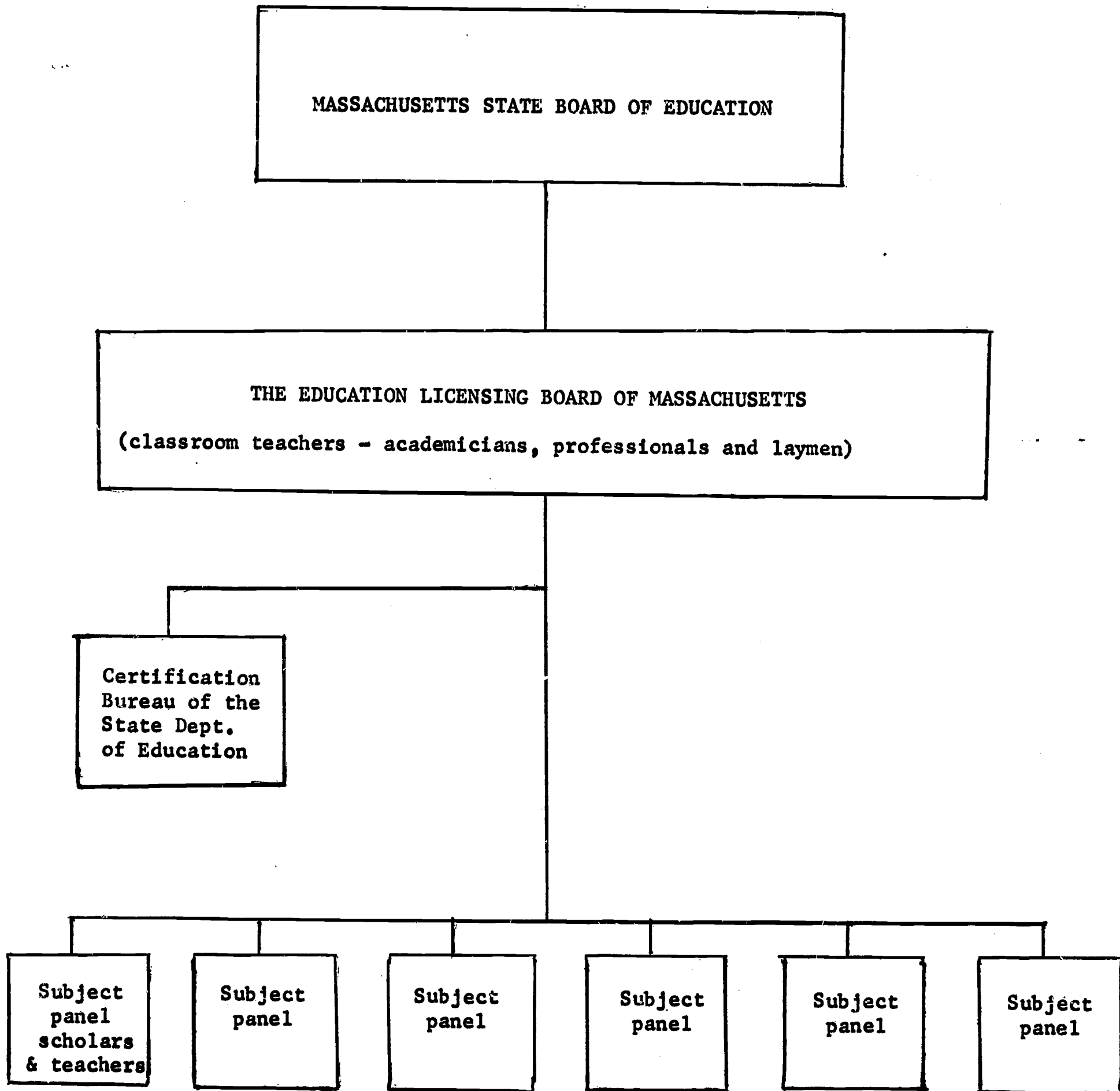
How effective, then, has been this institutional autonomy? Alas, if it has been effective, you and I would not be foregathered here today to talk about reform in teacher education and certification. I therefore readily grant that the Licensing Board does represent a degree of centralized control. That indeed is the whole idea. To put the matter bluntly, I don't think we are yet at the point where the states can trust most of the institutions to turn out good people. But please remember that the Licensing Board has the power to do so - that it can elect to trust the institutions - at any time it decides that certain colleges or universities are ready not merely to demand freedom but to accept responsibility for results. Meanwhile, the raison d'entre of the License Board is to reclaim the authority of the state in the education and certification of personnel for the public schools.

Or the board might seem to you something that only a lover of administration and organization could conjure up. I should be sorry indeed if you felt that way, since my instincts are all in the other direction. I don't think the board would be either expensive or administratively cumbersome. Still, as I indicated at the beginning, the addition of the Licensing Board to the extensive and convoluted machinery of state government would not of itself insure success. For all its good intentions and firm resolutions, it would not, after all, automatically improve the quality of a single training program. One can even imagine the board in full operation but with the general

level of teacher education remaining about where it is. Such dismal possibilities are probably inherent in all educational schemes, but I think they are minimal in this one.

Still, my proposal no doubt has plenty of bugs. Grand new plans for education have a way of falling on their face, either because their high-flying inventors overlook fatal flaws that are plain to other people, or because visionary plans are actually adopted and prove immediately hopeless in action. I don't think that is the case with the Licensing Board but I am willing to admit the possibility.

As you see, I have not tried to anticipate all the problems that could arise if the board were created. So I hope you won't reject the whole proposal because you see imperfections in it. The guts of the plan are in the broad interests and balance of powers represented on the board and in the specialized panels that operate under it; and my principal question to you is whether the central idea is sound and worthy of further development by the Advisory Council's project on teacher education and certification.



SOME THOUGHTS ON STATE CERTIFICATION OF TEACHERS

by

Hedly Beare

State Department of Education, South Australia
April, 1968

I. Defining the Terms

My first contention concerns a definition. I find the terms "certification of teachers" and "license to teach" used interchangeably, and this usage makes me uneasy because it means that basic assumptions have not been questioned. There is a difference between the terms - a semantic difference obviously in the first instance, but one that should also lead to a functional difference. Indeed to differentiate is to generate a new policy, and it is imperative that we make the differentiation with precision.

The dictionary indicates that "certification" means "a guarantee of genuineness"; a fuller definition is "a guarantee as to quality, qualification, fitness or validity", and by extension we derive the particular sense in which we all use the term - "to certify" is "to certify by means of a certificate showing adequate training or competence to practice a particular trade or profession."¹

Let us roll these definitions around our tongues and taste the blend of meanings in the word.

If certification means a guarantee of adequate training, then clearly the training establishment should have the responsibility of granting certification since it alone can give the assurance that the student has

¹Webster's Third International Dictionary, 1961.

met requirements of its training program. Any other agency which issues the certificate does so at second hand, on the say-so, if you will, of the training establishment, or else by the mere counting of credits without knowing precisely what went into the courses for which those credits were awarded. If the certificate is to testify to adequacy of training, then the trainer himself must issue it.

If on the other hand certification means a guarantee of competence to practice, then clearly the institution in which the teacher practices or the employer who pays for his practicing is the agency to issue the certificate, since it alone can give the assurance that the practitioner is performing competently to be worth the payment for his services. Any other agency which issues the certificate does so at second hand, on the say-so, if you will, of the person who pays for the performance of this practitioner.

Now on neither of these counts is it appropriate or even proper for a State Department to issue a teacher's certificate - unless it is the authority that does the hiring. (Both cases apply in Australia; neither appears to apply in Massachusetts, nor as far as I know, in the United States).

I have a personal liking for the extended definition - "a guarantee as to quality, qualification, fitness or validity". It is desirable for a teacher's certificate to testify to all these things, and we shall have to return to this aspect later. For the present, as the definition would have it, it seems to me that American school systems invest the power of certification in the hands of the one agency which is not logically in the position to handle the function!

"License to teach" is a different matter entirely. "To license" simply means "to permit" or "to give consent".² There is no doubt that a State legislature has the power to require that a child attend school for full-time education between the ages of 6 and 16, let us say. But it is a necessary corollary of such legislation that they designate what they will accept as constituting "a school"; by means of regulations, the State will have to devise a machinery to register schools, to issue licenses to those who will be teaching in them, and to develop some system to check that the children do in fact attend as the law demands. Should a child attend an institution that is not registered by the State, the child's parents must be liable to prosecution because by definition their children are not attending school under the meaning of the legislation. One would assume also that should the child attend school and be taught by an unlicensed teacher, this would also constitute a contravention of the law because they are not undertaking full-time education, under the meaning of the legislation. Further, an unlicensed teacher would be liable to prosecution for practicing without consent, as a charlatan or a quack, we might say, could be prosecuted for practicing medicine without permission.

In short, the State Department of Education could be (and I assume, usually is) invested with the authority to police the clauses of the State legislation relating to education, including registration of schools, licensing of teachers, and the compulsory attendance of children.

But licensing a teacher is a very different thing from certifying that a person is qualified and competent as a teacher. It is rather odd

²Ibid.

that we should talk about issuing a teacher's certificate to people who have not been allowed to teach. How can we "certify competence to practice" unless the person has been first given permission to try. I argue, therefore, that a license has to be issued first, before we are competent to decide whether also to grant certification, and the latter can only be issued after the licensee has been given a trial period as a practitioner, long enough, indeed, for us to judge whether he shows such "competence to practice" that we have the confidence to issue "a guarantee" to this effect. The "non-certificate certificate", to which Lierheimer has referred,³ is no more (and no less) than a license to teach, granted to people who do not qualify for certification as it is defined in New York State.

It is useful (if not imperative) to make this distinction between licensing and certification, for it clears away much of the overburden which prevents us from striking at the main lode. This analysis, in other words, defines a process, which could be formally stated as policy:

1. The State Department will issue a license to teach to the applicant if he shows evidence enough to convince them that he is likely to meet the criteria of competence.
2. There should be a probationary period after issuance of the license, during which time an assessment is made (by either the employing authority, or the training authority, or both) to judge whether the licensee is "competent to practise."
3. After the probationary period, the teacher's certificate may be awarded by the training authority (or the employing

³A. P. Lierheimer, "Give up the Ship" (a paper presented at Boston University Law School on Feb. 3, 1968) p. 12.

authority) guaranteeing that the licensee in their opinion has the "quality, qualification and fitness" to continue to practice permanently as a teacher. "Certification" would thus amount to professional acceptance, whereas "license to teach" may be sub-professional or at best a pre-professional requirement.

II. Licensing covers private and public school teachers.

Several matters of importance stem from the distinction made between licensing and certificating of teachers.

The State Department is acting as an executive of the State Legislature by issuing the license to teach. A child taught by a non-licensed teacher, by definition, is not fulfilling the requirements of the law; to put it the other way around, the licensing requirement is the mechanism to ensure that every so-called teacher in the State is competent to give instruction of a standard high enough to meet the stipulations of the law. Licensing is a bar to keep the incompetent teacher from practicing.

Put this way, licensing applies to every teacher in the State, no matter where he practices. In theory it should apply to teachers in factories, instructors in industry, teachers in independent schools, adult education instructors, and college professors no less than to public school teachers. It does not, of course.

Section 38 G "Certification of teachers by board of education" in the Laws of the Commonwealth of Massachusetts explicitly states:

"This section shall not apply to trade, vocational, temporary substitute teachers, or exchange teachers, or to teaching or administrative

interns....." ⁴

There is in fact good reason to make this exception. There is little point in demanding that education sought voluntarily be provided by a certificated or even licensed practitioner. Where it is important that standards be enforced is in the case where the laws of the land demand compulsory attendance. In that situation, the education provided for those compelled to attend must be in the hands of persons competent to handle it. Otherwise, it would be easy for someone to circumvent the law by providing a bogus school which meets the letter of the law while negating its purpose. Indeed, any individual, by calling himself a teacher, could do the same unless he were required to meet certain minimum prescriptions before being given a license to practice as a teacher.

Since the law applies to all in the State, therefore, it applies to all schools educating children between 6 and 16, and that obviously means private as well as public schools. It seems to me reprehensible, indeed indefensible, that a person who cannot meet the State's "certification of teachers" requirements (as the term is now loosely used) should be allowed to practice in private schools. On what basis is the present double standard predicated or defended?

It seems to me a simple question of legality. An unlicensed teacher by definition is incompetent to provide an education for children who must by law attend school. The children being taught by him, therefore, are not attending school as the term is defined under the law; in essence, the unlicensed teacher is unlawfully keeping children away from "school".

⁴General Laws of the Commonwealth of Massachusetts, Section 38G of Chapter 71, second paragraph, as appearing in Section 1 of Chapter 20, Acts of 1960.

Two things are imperative, then, it seems to me. (1) All schools should be registered with the State, (2) All teachers should be first licensed by the State before they may practice in a school where children under the compulsory attendance clauses are being educated. And the State Department of Education should carry out these two functions of registering schools and teachers since it is the legislature's executive in educational matters.

III. Requirements for a License to teach.

And this leads me to perhaps the most complex problem in this area. What should licensing involve? What qualifications should a person possess before he may be given permission to practice as a teacher?

One thing we need to be clear about initially. Certification is a professional requirement; licensing is a pre-professional qualification. I think it fair to require more stringent standards for certification. But no one should pretend that the license to teach invests a person with complete professional status. It is on this very matter that so much of the current discussion bogs down. Koerner and Conant were both critical of the States' requirements for teacher certification because they did not separate the initial permission from the desirable median.

Let us be categorical about it. The license to teach is the outer defense of the teaching profession. It is an excluding device only. Assistant Commissioner Baker rightly called it the "identified minimal standards for entrance into teaching".⁵ Dr. Lierheimer also referred to it as "a restrictive device".⁶

⁵J. F. Baker "Another Look at Certification", (notes on a presentation delivered to the Advisory Council on Education, Dec. 14, 1967) p. 1.

⁶Lierheimer, op.cit., p. 13.

The licensing prescriptions do not constitute the professional desiderata. They make no pretense at being such; they are, rather, the barest minimum below which the State refuses to go, the fingertip grasp on professionalism, the thinnest possible mixture of qualifications that will satisfy the State licensing authorities.

Let it be further conceded that certification is of a much higher order, and a level that should have to be won. This is the professional hallmark - again, the minimum one - that indicates the holder has attained "the quality, qualification, and fitness or validity" to be accepted as a professional educator. But more of that in a moment.

What should the minimum requirement for licensing be? This is a matter where it is impossible to give the right answer; so I am bold to suggest the following:

(1) To itemize 53 different "types of certification" (as is the case in Massachusetts) appears to me ridiculous. It should be possible to specify in broader terms (if I may speak in paradox) what qualifications are required. Furthermore I am conditioned to believe that the true professional recognizes individual differences and is happy to accommodate the unique in people; so it should be of supreme concern to us that we do not rule out by bureaucratic dictum the person with unusual gifts or qualifications who can enrich the profession. As the Pharisees demonstrated, strict adherence to rules can classify the saint with the sinners.

(2) Because of the teacher's position of awful responsibility with children, I would require a personal and physical qualification. The applicant must be declared physically and mentally fit, not harboring a sickness that could be transmitted to children; no one would argue with

this requirement. Furthermore, he must be of sound moral character with a responsible awareness of what are the long range objectives of education. I would not require that he have studied Education; I would simply require the right orientation or attitude, and evidence (in interview) that he appreciated the magnitude of the teacher's role.

(3) It would seem reasonable in America to ask for the possession of an earned college degree or its equivalent. I am not willing to argue that even this needs to be a requirement; my experience suggests that we could alienate a number of potentially excellent teachers by specifying such an academic requirement. Licensing is a device to exclude only the incompetent.

(4) Even the license to teach would not ensure employment, of course. It is a local school system which decides that, after the State has put the measure over the candidate.

(5) As a point of contrast (but not as my recommendation) it may be useful to detail what is required in South Australia:

Passing a medical examination to ensure sound health.

A satisfactory interview (with two interviewers who compare notes).

At least two years of successful tertiary education (for secondary teachers.

(With these qualifications, the applicant may be considered for employment as a classified (or unclassified) teacher but not as a certified teacher.)

IV. Requirements for a Teacher's Certificate

What then is Certification? To answer this question, we must fill in some empty places on our canvas.

It was Conant who said:

"I believe that the ultimate test (of whether a teacher becomes certificated) should be how the teacher actually performs in a classroom, as judged by experienced teachers."⁷

So the final qualification before certification should be satisfactory performance in a classroom. It would need a full academic year to make such a judgment, and so I suggest that the first year of teaching should be regarded as the probationary year before certification. I would not (unlike Conant) accept "practice teaching" as meeting this stipulation; I would demand a normal full-time teaching commitment for the trial period. Should the teacher not show up as competent, I would argue that he should not be granted the teacher's certificate; however his license to teach would still stand, and he could continue as a non-certificated teacher for as long as the employing authority was willing to pay for his services.

But while actual performance may be the final criterion, it should not be the only one. To be a competent professional, the teacher should have the guarantee of "quality, qualification and fitness or validity". Validity or fitness is teaching competence, the question of whether he can in fact do the job. But "quality" and "qualification" have to do with prior training; the teacher needs to be liberally educated in the subject areas in which he will teach (he needs "qualification", that is), and he needs to have insights into what his profession is about, the rationale and directional thrusts of his vocation, the philosophy that gives his work poise and purpose; I would define this as the distinctive "quality" of his work. How

⁸Ibid., pp. 233-239.

these academic and professional factors should be mixed I am not competent to say in this context. Even if the candidate appears to teach well, it could be a deceptive competence unless it is backed by understanding and purposefulness.

The agency who can best testify that the candidate has these three qualifications is the training institution. It alone is competent to judge the teacher's scholarship and professional stance. The employing authority may judge teaching competence, of course, but by its own lights, and these may vary from system to system; furthermore a political factor often comes into play which could imbalance the judgment, such as when the system's reputation depends on how many of its teachers are certificated, or if certification implies a higher salary (as it should.) The training institution, then working in conjunction with the school system, seems the logical authority to award the certificate of guarantee. Conant has suggested the appointment of a "clinical professor",⁸ and Lierheimer of "practitioner-professors"⁹; these men in the field could be the media used by the colleges and universities to visit the beginning teacher in his first year of service, and to coordinate his own assessments with those made by the administrators of the schools.

But the matter does not end there, for who judges whether the institution itself is competent to train, orientate and then validate the teacher?

Ideally, one must answer: "The profession". By way of analogy we may ask: Who is competent to admit a novitiate to the company of lawyers? The company of lawyers, no less. And we find that this is the situation which

⁸Ibid., pp. 233-239.

⁹Lierheimer, op. cit., p. 16.

already exists in teacher education. NCATE is a national body representing teacher educators. The NEA has set up an agency called TEPS (Teacher Education and Professional Standards). In certain areas there are regional associations of Colleges and Secondary schools. All these go into the training institutions to give accreditation, and the system seems to work well enough.

Is there cause for the State to make similar visits for assessment or accreditation purposes? Probably not. If my model for licensing and certification of teachers be accepted, the State Department is involved only in checking the efficacy of the qualifications presented by the person applying for a license to teach. The State Department would have a case for visiting and accrediting a teacher training institution only on the following premises:

- (a) In establishing that the quality of a College meets the State Department's standards, the Department could then give "blanket" recognition to the qualifications of a product from that College who applies for a license to teach. This is a doubtful justification, for many of those applying for a license will undoubtedly have been educated out-of-state, and it would be hardly possible to justify differential treatment of those applicants.
- (b) There is strong justification for the State Department to demand some rights of inspection in the case where the State provides financial support to the College. But the visit in this case would be to check efficient use of those funds and only marginally to judge whether the alumnus meets the State's teacher licensing criteria academically.

"Organizational approval" or "certification", therefore, need not imply that the State should accredit the teacher training institutions as Lierheimer suggests would be necessary. The whole issue of State inspection is fraught with the possibilities of violating academic freedom and professional autonomy, both jealously coveted. Furthermore the fact that professional agencies already conduct accreditation programs makes State inspection hardly defensible. Indeed one could argue that the qualifications gained in any NCATE accredited institution could be accepted by the State authorities on face value should they be presented by an applicant for a teaching license.

V. Some derivatives of this model.

Should the model this paper proposes be accepted, there are other aspects of teacher licensing to be resolved. Many of these would be resolved over time, but the following are likely to arise early.

By my definition a certificated teacher should be employable in any State, since he carries the qualification granted by the nationally accredited training institution. This would meet one of Conant's desiderata.

It need not follow, however, that a certificated teacher would meet the requirements of licensing! I am bold to suggest that this may be a healthy thing. Let us suppose that a teacher (who has been trained and then granted certification one year later) resigns to follow another occupation. Should he twenty years later seek permission to teach, I should hope the State would ask whether he had undertaken any refresher courses or updated his course work in the interim. Such a stipulation should be mandated by the State as part of its licensing requirements.

In fact, I would further hope that the profession would withdraw certification from a teacher who (a) loses contact with the classroom for an extended period or (b) does not undertake any continuing program of inservice education while practicing as a teacher. Whatever the case be, however, any teacher, upon breaking service with any school system, should be required to make another application for a license to teach. I am perverse enough to suggest that this apply even in the case of a teacher who transfers out of one school system in the state into another system. For the danger is increasing, concomitant with the "education revolution", of our condoning obsolescence in teachers.

Finally, in the face of my model, one ought to ask whether there is any necessity at all in the State's being involved with teacher certification. Requirements for gaining a license to teach must clearly be spelled out; and the State cannot shelve this function. But there is no reason why licensing requirements should not fluctuate as the supply and demand of teachers dictate. Certification on the other hand, is a professional recognition - perhaps, more precisely, recognition by the profession itself - and will not be subject to fluctuation, nor will it be affected by the exigencies of supply and demand.

Should the distinction which I have drawn be recognized, many of the difficulties and anomalies concerning state certification of teachers will be found to have disappeared.

POLICY AND PERSPECTIVE

by

LINDLEY J. STILES

Professor of Education for Interdisciplinary Studies,
Sociology, and Political Science, Northwestern University

"FAILURE OF TEACHER CERTIFICATION"

However one views the licensing of teachers in the United States, the inescapable conclusion is that the system is failing in most, if not all, states. Despite the noble intentions and dedicated efforts of those responsible, the process of teacher certification does not function as intended. First, it often fails to screen from practice those who are unfit to teach. Second, and equally unfortunate, is its effect as a deterrent to able people who otherwise might enter teaching.

Evidence of the failure of certification policies is found in the lack of confidence in existing systems. Classroom teachers, who have little responsibility for determining standards for entry into their fields, resent the way licensing plans are formulated and operated. They blame superintendents and boards of education for employing unqualified teachers. They generally consider requirements for teaching licenses too rigid, too quantitative, and too unrelated to the ability to teach successfully. Superintendents of schools show little confidence in the standards imposed when they employ teachers who do not fully meet the specifications for a license or when they set up their own plans as they have in many large cities.

Apparently, administrators believe that some teachers who hold only temporary certificates will do better than those fully endorsed, for no administrator would deliberately stake his leadership on incompetent persons. Deans and professors in schools of education, who are perhaps as responsible as anyone for present systems, do not like the way they work. They know that some people receive licenses who should not and others who should are ruled unqualified. Professors in the liberal arts feel the systems require candidates to take too many specific education courses. Officials in state departments of education who must administer the systems know that they are saddled with procedures that represent more busywork than professional quality. The public, if it is informed at all, wonders why educational leaders cannot develop a system of certification that does what it is supposed to do -- protect students against incompetent professionals.

An obvious sign of lack of confidence in licensing plans is the practice in about half the states of automatically granting teaching certificates to graduates of teacher education programs that are accredited by the National Council for Accreditation of Teacher Education. Making licensure synonymous with accreditation is tantamount of abandoning any effort to evaluate the fitness of individuals to teach. As everyone knows, incompetent professionals can be graduated from accredited institutions. In the field of teacher education, such a happening is highly probable since ranges in quality of institutions involved are extreme. Accrediting standards do not differentiate between weak and adequate programs of preparation. Nor do they have much relationship to the quality of the product. It should be noted that reforms in accrediting for teacher education are underway. However, even if such efforts succeed in producing standards and procedures that differentiate programs qualitatively,

which is not likely in light of tradition, it would be still a mistake to translate graduation from an "NCATE Approved" institution into automatic certification to teach, for either initial or reciprocity purposes. If such practices persist, certification as the process of admitting individuals into professional practice will, in effect, be abolished.

A crucial weakness in most systems for certification is their heavy dependence on credit counting. Even some program approval plans simply shift the checking of transcripts from the state department to the institution. When specific courses are specified for licensure, inflexibility is the inevitable result, regardless of the system followed. Determining fitness to teach by courses completed provides little in the way of qualitative standards. Content and effect vary so much among students, professors, and institutions that such prescriptions guarantee no minimum standards for either knowledge or performance. They serve mainly to frustrate both individuals and institutions who approach teacher preparation with qualitative goals in mind.

Present certification plans in most states do not reflect the nature of a teacher's competence, such as ability to teach the new science or mathematics or culturally handicapped children. Nor do they serve to counteract obsolescence in either teachers or programs of preparation. Their impact is to produce sterility, rather than initiative and creativity, in those who teach and those who teach teachers. Modifications in present approaches cannot hope to make much difference. What is needed is a new start, one that takes seriously the purpose of licensure -- the guarantee that all certified to teach will have minimum competence. Also, any new plan should be evaluated in terms of whether it deters the able from entering the teaching profession.

Qualitative guidelines for new approaches to certification might include a mechanism for administration that is free from political pressures, either from governmental processes, professional groups or individual vested interests. It should enlist the participation and loyalty of teachers, school administrators, educationists, liberal arts professors, leaders in state departments of education as well as lay groups concerned directly with education. Institutional responsibility for planning programs with accountability for quality of teachers produced should be a priority. The focus should be on qualitative goals that relate to both knowledge and professional skills; emphasis should also be on experimentation to produce the various kinds of teachers needed. Important are incentives for teachers to keep up-to-date.

The transcript method of certification should be abolished. In its place might be developed at least three basic routes to certification; program approval; examinations covering both tested knowledge and demonstrated skills; and attestment of competence by professors. Standards should be defined in terms of intellectual capacities, scholarly attainments, personal qualities and professional abilities. Rather than deducting the knowledge and skills needed from numbers of credits earned in courses, descriptions might well be developed of the kinds and depths of understanding of content as well as the teaching abilities desired. It is possible, for example, for teachers in schools and scholars in colleges and universities to agree on the mathematical theory, concepts and computational and teaching skills needed to teach the new or traditional mathematics. Once such standards have been established, institutions will have guidelines for qualifying candidates for teaching. Similarly, prospective teachers can choose programs in terms of

their own preferences. Likewise, school systems can employ teachers with the kind of mathematical preparation desired. The common assurance to all, however, would be minimum qualitative standards for successful teaching -- which is the purpose of certification.

PREPARING AND CERTIFYING TOMORROW'S TEACHERS

by

Lindley J. Stiles
Northwestern University

Tomorrow's requirements for teachers are only partially predictable from today's demands and deficits. Thus, finite prescriptions for their preparation are neither possible nor desirable. The need is to face the future free from stereotyped thinking programs. Planning should encourage qualitative goals, experimental approaches and objective accountability for results. Interdisciplinary and interagency cooperation are essential if maximum educational quality and efficiency are to be achieved.

Various forces promise to influence the roles and preparation of teachers in the future. One is the increasing number of students to be served. Another is the new communications technology available for help. The premium now placed on intellectual development is another influence. A related factor is the growth of knowledge and the new ways of using what is known. Internal tensions and international relationships pose other dimensions of the teacher's mission. Underlying all is a commitment to humanity that exempts none from the benefits that education can bring.

A first priority will be teachers for handicapped students--the socially and economically disadvantaged as well as those with mental, emotional, and physical limitations. Thirty to forty percent of the children and youth of tomorrow may well fall into these classifications. Another high priority will be for teachers who can work with children during pre-school years to counteract environmental forces that undermine educational

motivations and potentialities. Equally in demand will be teachers who can teach reading and the other basic skills of learning. Specialists in the various subject fields will be needed at all levels, from primary through adult education. Experts in the behavioral sciences, communications technology and instructional techniques will be part of the teaching team as will different types of paraprofessional personnel.

Programs to prepare teachers need to be complete redesigned, in the basic arts and sciences and subject specializations as well as in the pedagogical area. Prospective teachers need a foundation of basic studies that provides an understanding of the life and problems of the times as well as a base for cultural and scholarly development. Specialized scholarship should develop in-depth acquaintance with a subject field, including its structural characteristics, major concepts and intellectual processes as well as the different ways it may be organized for learning in schools. The professional preparation of teachers needs to be action oriented, moving from vital first hand to relevant vicarious experiences -- the opposite of traditional approaches.

Tomorrow's teachers must be drawn from the top levels of intellectual talents, since no program of preparation can compensate for deficits in mental capacities. Those who teach must be prepared -- academically, professionally, and psychologically -- to provide instructional services to students who are educationally sick. Specialization will be required -- in subject fields, for given age levels of students and, also, for boys and girls with particular learning difficulties. Essential will be the ability to function in and to give leadership to an instructional team that includes various human and technological resources. Keeping up-to-date,

both in knowledge of a subject and professional skills, will be an imperative for all.

The test of programs of preparation and certification for tomorrow's teachers is whether they attract and retain the best and screen out those unfit for teaching. To achieve this objective new approaches and perhaps a new mechanism for cooperations are needed to establish and maintain standards that ensure quality with resilience. The objectives should be to build on present strength, to involve all concerned in viable partnerships, to encourage experimentation, to focus on quality of performance and to provide multiple routes for preparation and entry into teaching. Related goals should include effective ways of helping teachers to keep abreast of new knowledge and professional practice as well as providing professional recognition for those in service.

Massachusetts has the opportunity to pioneer new patterns of preparation and certification for teachers. The study now being conducted by the Massachusetts Advisory Committee on Education promises to point the way. Encouraging is the cooperation already developing between public and independent institutions, local school systems, professional associations, citizen bodies, and the State Department of Education. The evidence collected to date indicates that all want to work together to achieve new standards of quality for the preparation and certification of teachers.

STUDY OF TEACHER EDUCATION AND CERTIFICATION IN MASSACHUSETTS

A Paper Prepared for the Massachusetts Teacher

by Dr. Lindley J. Stiles, Northwestern University
Director of the Study

Anyone who asks questions about teacher education and certification in Massachusetts encounters a variety of responses.

"Some college graduates who are qualified on paper to obtain state certificates simply don't know subject matter well enough to teach," is the way one department chairman described the situation.

"I had taught six years successfully, as a fully certified teacher in another state, before I moved to Massachusetts. Here, despite the need for teachers, I was denied a license because my transcript did not fit what the law required," was an outsider's reaction to Massachusetts' system of certification based on transcript record.

A representative of the state's teaching profession observed: "The plan of certification evolved as a political compromise; but it is not working. It fails to screen out the incompetent and repels many able people from becoming teachers".

A superintendent of schools reports: "Some of the best teachers we employ cannot be certified initially. We are forced to circumvent state regulations, or at least bend them a bit, because they are too rigid."

A college dean pointed out that "Some students our faculty does not endorse as fit to teach can become certified if they have the credits required."

The observation of a citizen was: "We parents cannot understand why a license to teach should not mean that our children are protected from incompetent practitioners. The present plan seems to place more emphasis

on credit accumulation than on actual knowledge and ability to teach."

A state official explained: "We try to make the system work, but our hands are tied by laws that must be enforced."

LACK OF CONFIDENCE

Such comments, typical of those that are coming to the staff and committee responsible for the study now underway in Massachusetts, reflect a general lack of confidence in the present system. Although the reactions quoted above relate primarily to the process of certification, they carry overtones of criticisms of the ways in which teachers are being prepared. So closely are the two processes related, in fact, that it is impossible to consider one apart from the other.

Teacher education leaders, for example, feel that state certification prescriptions -- elsewhere as well as in Massachusetts -- tend to negate faculty initiative and to restrict freedom to test new approaches to teacher education. Academic professors feel they are given, or else have assumed, too little responsibility for the quality of teachers produced. Teachers and administrators in elementary and secondary schools report they have little voice regarding how teachers are prepared.

Not all the concerns about teacher education link directly to teacher certification, but they do relate to the State's responsibility in this area.

Representatives of the general public, for example, cannot understand why enough teachers are not being graduated to teach the handicapped children -- including the socially and economically disadvantaged as well as those with physical and emotional limitations. They also ask why teachers are not being prepared to make greater use of the new media, para-professional assistants, or to teach the new curriculums.

Heads of schools and departments of education point out that teacher

education programs, in all kinds of institutions, generally have been poorly supported. For example, to illustrate one type of critical deficit, few institutions have adequate resources to provide the best kind of supervised practice in teaching -- which is the heart of the teacher's preparation. Every institution must make-do with improvised arrangements that have to be re-negotiated with school systems on a year-to-year basis. To obtain training stations, institutions compete with each other. In larger cities 10 to 30 colleges and universities may be involved. The situation produces frustrations for school systems, as well as for college officials and prospective teachers.

FOLLOW THE LEADER?

Massachusetts people, professionals and citizens alike, to their credit take little comfort from the fact that their criticisms and concerns for teacher education and certification are reflective of similar attitudes in other states across the nation. That such is true suggests, many feel, the futility of following patterns popularized elsewhere.

Massachusetts, the first state to develop professional programs to prepare teachers, was the last to follow the national pattern of state certification. Its step in this direction was a modest one, with credit requirements in both teaching fields and professional courses well below the national average. As a consequence, greater diversity exists in programs of preparation, perhaps, than is the case in states with higher prescriptions of courses and credits for certification. In some cases, such freedom has made possible greater experimentation.

The temptation to attempt to improve teacher education and certification by boosting amounts of credits required, or to extend the length of preparation without reference to ability to teach -- in effect to follow

national trends -- is counteracted by an awareness of the failures of such approaches elsewhere.

In this sense, Massachusetts' tardiness in following other states may be a blessing in disguise; it now can benefit from the experiences of others. What has happened elsewhere suggests that Massachusetts should strike out on its own to find better ways to prepare and certify teachers. By so doing, it could design and test new approaches that are uniquely adapted to the state's historical traditions and multiple diversities. The measurement of success should be the quality and kinds of teachers produced, rather than the degree of conformity to national patterns.

NEW PATHS SOUGHT

Enthusiasm for breaking new paths in teacher education and certification appears to be growing, as increasing numbers of people become involved in the study. Such views come from representatives of public and non-public schools and colleges, the State Department of Education, the Massachusetts Teachers Association, and various segments of the teaching profession as well as key citizen groups. All seem determined to develop new approaches to teacher education and certification that will, in fact, guarantee quality standards with resilience, as urged by Dr. William C. Gaige, director of the Massachusetts Advisory Council on Education, the agency responsible for the study.

The Massachusetts Advisory Council on Education is, in itself, a unique approach to improving education. Created by the Legislature in 1965 as a permanent mechanism to study and provide help to solve critical educational problems, the Council functions as a research arm for all educational agencies as well as the legislature.

Key strengths of the Council are its permanent staff that provides

coordination and continuity, an established budget to support research projects, its dual roles in trouble shooting and long-range planning, and a capacity to draw upon the resources of other organizations as well as to generate inter-agency cooperation.

As an example of the latter, Boston University, a private institution, is providing the research staff for the teacher education and certification study; much of the data needed is coming from the Division of Research and Development of the State Department of Education; while the Study Committee itself is composed of representatives of both public and non-public schools and institutions of higher learning and lay as well as professional leaders.

The study of teacher education and certification is a good example of both trouble shooting and long-range planning. It came in response to a generally recognized need to improve functions that were not living up to expectations. Already, various groups in the state, including the State Department of Education, were attempting to plan improvements. The need was for an approach that would unite the efforts of all, as the Council is now attempting to do.

Of necessity, the focus of the study must be long range. Tomorrow's requirements for teachers are only partially predictable from today's demands and deficits. Thus, finite prescriptions for their preparation are neither possible nor desirable. The need is to face the future free from stereotyped thinking and programs. In this sense, a test of the effectiveness of this study will be the lasting value of its recommendations. If it becomes necessary to repeat the investigation 10 or 15 years hence, present efforts will have failed.

A LOOK AT TEACHERS

The scope and focus of this study includes a look at the number and kinds of teachers needed in Massachusetts, now and predictable in the foreseeable future. Sources of supply, within and outside the state, as well as quality of preparation are being studied also. Data from transcripts of samples of teachers certified over the past five years are expected to show where teachers come from, and the nature and quality of their preparation. Characteristics of programs of teacher education in Massachusetts institutions are being identified, along with plans and problems of various colleges and universities. The extent to which children are provided instructional services by competent and qualified professionals is being identified. How teachers keep up to date in knowledge and professional skills is another area of investigation.

Of particular concern in this study are ways in which the State Department of Education should provide financial support and leadership to improve student teaching and internship programs, as well as to stimulate experimentation in all aspects of teacher education and certification.

A possible recommendation will be for the Legislature to appropriate funds to the State Department so that it can provide re-imbursements to school districts which reduce the teaching loads of classroom teachers who supervise student teachers or interns. A related responsibility might be the coordination of assignments for the clinical experiences -- for prospective teachers in both public and non-public institutions.

In other ways, the state's plan of certification as well as financial support should encourage preparing institutions and school systems to test new approaches to teacher education. In areas in which present programs are not as effective as required, such as the preparation of teachers

for inner-city schools, it likely will be necessary to re-design learning experiences for children as well as programs of preparation for teaching. In fact, the approach of planning the teacher's professional preparation from a base of first-hand successful experience in particular teaching situations, as contrasted with traditional programs that depend heavily on vicarious learning, may be preferable in all areas.

NEW AGENCY ENVISIONED

With respect to the certification of teachers, attention is being given to the use of qualitative assessments of teaching ability. It is envisioned that a new agency may need to be developed -- one related to the State Department of Education -- that will achieve active involvement of all concerned with the preparation and employment of teachers in both public and non-public schools and colleges. Its function would be to make teacher education a first priority, to coordinate the development of standards for the preparation of various types of educational personnel, and to stimulate experimentation by schools and colleges.

Multiple routes for preparation and entry into teaching are envisioned. Related goals include designing effective ways to help and encourage teachers to keep abreast of new knowledge and professional practices, as well as to provide suitable professional recognition for those in service. Central in the thinking of the staff and Study Committee is the development of procedures for certification that will be free from politics -- both from within and outside the profession -- as well as continuously responsive to the needs of schools and the best judgements of academic and professional leaders in each field.

Plans for certification recommended by the Study are expected to place greater responsibility upon the preparing institutions. Academic

professors will join in partnership with professors of education and representatives of the Teachers Associations, including elementary and secondary school teachers and administrators. State Department of Education personnel will be called upon for help. Instead of being told how teachers must be prepared in order to be certified, each institution will be asked to decide how it wants to prepare teachers and the ways in which its success will be assessed.

NEW APPROACHES SOUGHT

The "Program Approval Approach", already operating in Massachusetts' state colleges, undoubtedly will be recommended to replace the "Transcript Method", providing that ways can be found to keep such a procedure from degenerating into a credit-counting process that merely shifts this operation from the State Department to the preparing institutions. Optional plans that hold promise include the "Examination and Demonstration of Competence" as well as the "Professional Attestment" procedures. The latter is similar to the process used by graduate schools to award doctoral degrees. The possibility of "Field Certification", on the basis of demonstrated ability with the judgement being made by professional colleagues, is being considered as well.

Reciprocity procedures are being studied, also. Certainly not to be recommended is the practice, now followed in about half the states, of automatically granting a teaching certificate to anyone who has graduated from an institution accredited by the National Council of Accreditation for Teacher Education (NCATE). An acceptable rating for a teacher-preparing institution every ten years is no guarantee that all of its graduates will be successful teachers. If certification has a function at all it is to assess individual competence. Ways are needed to obtain such professional judgements

for teacher candidates who come from other states, as well as for those graduated by Massachusetts institutions.

A key priority of this initial study is to recommend appropriate approaches to improving teacher education and certification. Recommendations for legal actions, possible new mechanisms for leadership, and alterations in procedures necessary for the proposed changes to take place will be made as well.

Because the focus will be on modifications in conceptions and processes rather than on prescriptions, some may be disappointed that time will be required to make the transition from present practices to new ones. However, the long-range results are believed to be worth the delay and effort involved. They are expected to give Massachusetts an over-all plan that works and is continuously adaptable to the times -- one that enlists the cooperation and support of all.

WIDE PARTICIPATION A GOAL

The kind of involvement and continuing search for fresh, workable ideas for the future characterizes the study itself. Throughout its planning and development, the goal has been to achieve wide participation of representatives of both civic and professional groups.

A Study Committee, the composition of which reflects such diversity, provides advice, priorities, interpretations and assessments. It has been holding regular meetings to hear views of representatives of groups concerned with teacher education. Three Advisory Conferences have brought together key leaders, laymen as well as professionals, to hear and analyze the ideas of experts and to record views on questions pertaining to preparation and certification of teachers.

By the time the study is completed all institutions in the state that maintain comprehensive programs to prepare teachers will have been visited to obtain information on practices and preferences. Also, interviews are being conducted with representatives of professional organizations, including the Massachusetts T.E.P.S. Commission.

In addition, randomly selected teachers, administrators, professors and laymen are being asked to report attitudes and suggestions about what can and should be done to improve the preparation and certification the teachers employed, their assignments, professional development and general effectiveness. Throughout, close cooperation is being maintained with the State Department of Education and the Massachusetts Advisory Council on Education.

AN OPPORTUNITY TO PIONEER

The general concensus of persons already involved in this study is that Massachusetts has an opportunity to pioneer new patterns of preparation and certification for teachers. "The impact can be as revolutionary for teacher education as the Flexner Report was for medical education," is the way one member of the Study Committee sizes up the potential of the effort.

Whether such a dream will become a reality will depend upon the willingness of all to join in partnership to generate and implement better ideas. If such general support develops, particularly within the organized teaching profession, the prospects are that the Massachusetts Legislature, to whom the study will be reported by the Advisory Council, will pass the required enabling legislation and provide the necessary financial support.

The benefits to all will be teachers, well prepared and competent, to provide the various kinds of educational services required by children and youth of Massachusetts in the future. To those who work in schools and colleges, the gain will be in greater self-respect and enhanced professional status.

THE PROBLEM OF TEACHER CERTIFICATION IN MASSACHUSETTS

by

Albert William Mayers

A Paper Presented to Phi Delta Kappa
April, 1968

Massachusetts, in July of 1951, became the last state in the Union to require state certification of teachers. A general certificate was in effect from 1951 to 1956. Not until 1956, were professional personnel associated with public schools certified in their specific area of specialization. Pre-1951, personnel were exempted from certification in a specific area of specialization. Presently, there are over twenty thousand professional personnel serving in Massachusetts public schools who are exempted from current certification requirements.

According to the "Willis-Harrington Report", "Present stipulations for teacher certification in Massachusetts are among the most lenient to be found. In fact, supervised classroom teaching requirements are the lowest in the nation, with only two semester hours to be gained in an unspecified manner." ¹

The Massachusetts Certification Law of 1951, and amendments provide only minimal standards for the certification of teachers. The law states that the Board of Education shall grant certificates to teachers, principals, supervisors, directors, school librarians, superintendents, and assistant

¹ Benjamin C. Willis and others, Report of the Special Commission Established to Make an Investigation and Study Relative to Improving and Extending Educational Facilities in the Commonwealth, Commonwealth of Massachusetts House 4300 (Boston: Commonwealth of Massachusetts, 1965), p. 351.

superintendents upon the submission of proof of (1) American citizenship, (2) good health, (3) sound moral character, (4) possession of a bachelors or higher earned academic degree or a graduate of a four year state approved normal school, and (5) completion of course requirements as established and put into effect by the Board of Education.

Specifically exempted from certification, according to the law, are (1) trade and vocational teachers, (2) temporary substitute teachers, (3) exchange teachers, and (4) teaching or administrative interns.

A school committee may also seek exemption if unable to obtain qualified teachers. They may apply for waivers if in the opinion of the Department of Education, it would create a great hardship to hire a certified teacher. In this case a teacher may be hired for a period of one year.

The law also stipulates that a non-citizen may teach the language of his national origin, upon the request of a school committee for a period of six years. Certificates issued to non-citizens are not valid after a period of six years and may not be renewed.²

Specific course credit requirements and interpretations of the Acts of 1951, and related acts have originated in the State Department of Education. Due to the fact that the certification law is very general a large number of regulations and interpretations have developed. Some of the more significant requirements are as follows:

²General Laws Relating to Education (Chapter 71, Section 38G. Boston: Massachusetts Department of Education, 1966), pp. 124-5.

1. Requirements for Elementary Teachers - Elementary teachers must have 18 semester hours in elementary education including 2 semester hours of supervised student teaching. Only the District of Columbia, Illinois, and North Dakota require less than 18 semester hours.³
2. Requirements for Secondary Teachers - Secondary teachers must have 12 semester hours in secondary education including 2 semester hours in student teaching plus 18 semester hours in major fields and 9 semester hours in minor fields. A secondary teacher may teach half-time in minor fields or one-fifth time in areas with no formal preparation. It is noted, in contrast to the above, that Alabama requires 30 semester hours in subject area concentration at the secondary level, New York requires 36 semester hours, and Wisconsin requires 54 semester hours. Only Alaska, Iowa, Michigan, and North Dakota require less preparation than Massachusetts.⁴
3. The Waiver of Requirements - As previously noted in the hardship clause of the Certification Law, a school committee may hire uncertified teachers for a period of one year. State Department regulations allow the waivers to be renewed for a period of three years.⁵ In actual practice, non-certified personnel are able to use this method to remain in public school teaching.
4. Permanence of Certificates - Massachusetts certificates are considered to be permanent. No provisional certificates are issued. Most teachers receive their certificates upon, or shortly after graduation, with no experience other than student teaching. According to state department regulation, a teacher is not required to earn a masters degree or even to take one additional training course. Many states also require the periodic renewal of certificates.⁶
5. Revocation of Certificates - Although certificates may be revoked, they rarely are. Since the advent of certification approximately thirty certificates have been revoked, mostly on the grounds of immoral behavior.

³Ibid., p. 55.
School Personnel in the United States (Washington: NEA, 1967), p. 53.

⁴Ibid., p. 55.

⁵General Instructions and Interpretations Relative to Chapter 27
(Boston: Massachusetts Department of Education, 1967) p. 2. (Mimeographed)

⁶Stinnett, op. cit., p. 51.

6. Certification Does Not Include All Professional Personnel - School nurses, school business officials, and audio-visual specialists are not included in the system of certification. There are no provisions for temporary teachers serving less than a full year, they may teach any subject at any level.
7. Certification is Applicable to Public Schools Only - Eighteen states require non-public professional personnel to be certified at some level. The largest school system in Massachusetts and New England, the school system of the Archdiocese of Boston, does not come under the certification law in Massachusetts.⁷
8. Lack of Reciprocity - Due to the minimal standards of certification in Massachusetts, teachers without additional preparation beyond the certification requirements are often unable to find positions elsewhere. Massachusetts does have reciprocity with some Northeastern states at the elementary level.
9. Alternative to Student Teaching - One semester of teaching under appropriate school supervisory personnel may be accepted in lieu of student teaching. A letter from the superintendent or principal at the end of the semester is the only proof required. Three semester hours of education credit may be allotted for this teaching experience.
10. Alternative to Required Course Work - "Three years of successful teaching, supervisory or administrative experience, appropriate to any certificate, may be accepted by the Board of Education in lieu of courses required for the certificate."⁸
11. Decentralization of Certification - Not all certification is centralized in one department in the State Department of Education. The Division of Vocational Education and the Department of Adult Basic and Civic Education each issue their own separate certificates while the Division of Certification and Placement certifies most public professional personnel. There appears to be little coordination between the three agencies.
12. Training and Certification of Teachers - There is very little coordination between the training and certification of teachers. The state certifies teachers and the colleges train them. Teachers, administrators and laymen have very little to do with the process.

⁷Ibid., p. 73.

⁸General Instructions and Interpretations Relative to Chapter 27
loc. cit.

13. Standards for Certification - Anyone otherwise qualified may apply for certification upon the completion of the required course work. Credits may be obtained from various educational institutions outside of any single program of teacher preparation. No examination of general, professional, or subject area background is required.
14. Organization of the Division of Certification and Placement - The staff of the Division consists of one director, one assistant director, one accountant, and four clerks. They issue 51 different certificates to over 7000 annual applicants, handle hundreds of requests for waivers, and handle the placement activities of the division. Obviously, they are not equipped to give detailed individual attention to all applicants.⁹

An illustration may serve as a summary. A fully certified history teacher with 12 semester hours of education courses and 18 semester hours of history may obtain a position as a teacher of Ancient history even though he had never had a course in Ancient history.

It is also possible for a non-fully-certified teacher to obtain the position if he was employed prior to 1956, has 9 semester hours in history and teaches it half-time, teaches in a non-public school which is not included in the certification law, or teaches where a certified history teacher is not available.

It may be further noted that a non-certified teacher hired by a system unable to obtain a certified teacher may complete his practice teaching requirement by serving under the supervision of his principal or superintendent for a period of one semester. The type or degree of supervision is not spelled out. At the end of three years of "successful" experience in this capacity, he may apply for permanent certification without completing the required course work.

⁹ Willis, op. cit., p. 352.

Massachusetts not only has one of the most lenient certification laws in the country but also has many loopholes where even the minimal requirements may be passed.

Specific recommendations are here being offered to lead to the possible improvement of teacher certification in Massachusetts.

1. Need for Various Levels of Certification - Baker recommends two levels of certification. The first or associate level would set minimal standards for entrance into the teaching profession. The second or professional level would emphasize: (1) continuous professional growth, (2) continuing education, and (3) repeated evidence of excellence.¹⁰
2. Need to Keep Up with New Knowledge and Professional Techniques - Inservice training, workshops, college evening and summer programs, and curriculum development projects could be utilized as part of the certification process. Renewal of certificate should be based upon participation in these or similar activities.
3. Need for Reciprocity - Stinnett states the need for a basic rationale for qualified teachers to be able to move freely across state lines. Stinnett further states that this can be solved by the state certification directors themselves. N.A.S.D.T.E.C. could, with the assistance of strategic groups, be able, through national conferences, to develop national standards.¹¹
4. Need for Program Approval - Lierheimer stresses the need for program approval of teacher education institutions. Not merely the counting of credits but individualized programs approved by an agency of the state department of education.¹²
5. Need for Participation of the Profession - Edelfelt, of N.C.T.E.P.S., states the need for the profession itself to become more directly responsible for the formulation of certification policy. Standards and safeguards could be improved if

¹⁰James F. Baker, "Another Look at Certification" (paper read at the Certification Study Committee Meeting, Boston, Massachusetts, December 14, 1967) pp. 2-3.

¹¹Stinnett, op. cit., pp. 10-11.

¹²Alvin P. Lierheimer, "Give Up the Ship" (paper read at the Third Advisory Conference on Certification, Boston, Massachusetts, February 3, 1968), p. 4.

colleges, school districts, and professional associations worked together, possibly in new agencies.¹³

6. Need for Optional Plans of Certification - Stiles envisions a series of alternate plans for teacher certification. Plans that hold promise are examination, demonstration of competence, professional attestment, and an evaluation of demonstrated ability.¹⁴
7. Need for a Change in Organizational Structure - Stiles suggests the creation of a new agency to achieve involvement of all concerned with the training and hiring of teachers. This agency would be related to the state department of education.¹⁵

Koerner calls this agency, "The Education Licensing Board of Massachusetts". The board itself would consist of classroom teachers, academicians, administrators and laymen. It could create a series of panels to advise the board in various subject areas. The issuing of licenses and administrative procedures would be conducted by the present certification bureau.¹⁶

8. Certification of Non-Public Professional Personnel - Sister Mary John reported that state certification provides systematic controls for the staffing of Catholic schools. The added cost and work by the state department to certify all Catholic school teachers would be extremely burdensome. However, it seems the responsibility of the state to provide supervision information on these teachers. Catholic schools, in collaboration with the state, could help formulate and comply voluntarily with state certification requirements.¹⁷

¹³Roy A. Edelfelt, "Certification and Teacher Competence: Repair or Reform" (paper read at the Third Advisory Conference on Certification, Boston, Massachusetts, February 3, 1968), p. 8.

¹⁴Lindley J. Stiles, "Study of Teacher Education and Certification in Massachusetts," The Massachusetts Teacher, XLVIII (March 1968) P. 16-17.

¹⁵Ibid. p. 16.

¹⁶James D. Koerner, "The Education Licensing Board of Massachusetts" (paper read at the Third Advisory Conference on Certification, Boston, Massachusetts, February 3, 1968), p. 13.

¹⁷Sister Mary John, D. C., "State Certification of Teachers in Catholic Elementary and Secondary Schools" (unpublished Doctor's thesis, St. John's University, New York, 1966), pp. 92-3.

The purpose of the above was to present possible recommendations for the improvement of certification. Obviously they could have been spelled out in much greater detail. Hopefully they point the way out of the present dilemma and show that there are possible solutions to the problem of certification.

BIBLIOGRAPHY

A. BOOKS

Stinnett, T. M., A Manual on Certification Requirements for School Personnel in the United States. Washington: National Education Association, 1967.

B. PUBLICATIONS OF THE GOVERNMENT

Massachusetts Department of Education. General Laws Relating to Education. Boston: Massachusetts Department of Education, 1966.

Willis, Benjamin C. and others. Report of the Special Commission Established to Make Investigation and Study Related to Improving and Extending Educational Facilities in the Commonwealth: House 4300 Boston: Commonwealth of Massachusetts, 1965.

C. PERIODICALS

Stiles, Lindley J. "Study of Teacher Education and Certification in Massachusetts", The Massachusetts Teacher, XLVII (March, 1968).

D. UNPUBLISHED MATERIALS

Baker, James F. "Another Look at Certification." Paper read at the Certification Study Committee Meeting, Boston, Massachusetts, December 14, 1968.

Edelfelt, Roy A. "Certification and Teacher Competence: Repair or Reform." Paper read at the Third Advisory Conference on Certification, Boston, Massachusetts, February 3, 1968.

Koerner, James D. "The Education Licensing Board of Massachusetts." Paper read at the Third Conference on Certification, Boston, Massachusetts, February 3, 1968.

Lierheimer, Alvin P. "Give Up the Ship." Paper read at the Third Advisory Conference on Certification, Boston, Massachusetts, February 3, 1968.

Massachusetts Department of Education. "General Instructions and Interpretations Relative to Chapter 27." Boston: Massachusetts Department of Education, 1967. (Mimeographed)

Sister Mary John, D. C. "State Certification of Teachers in Catholic Elementary and Secondary Schools." Unpublished Doctor's thesis, St. John's University, New York, 1966.

A SUMMARY REPORT

Presented by Sister Ann Augusta

February 14, 1968

In the group discussions, conferences, and meetings the questions which most frequently came to the fore seemed to be these six:

QUESTIONS

1. A Philosophy for teachers.
2. Time for observing teachers working with children.
3. Time devoted to pupil's learning should be a must.
4. How do teachers show concern for the future man?
5. What of teaching strategies?

SUGGESTIONS

A course in Philosophy of Education has been a requirement for certification. A look at #4 might help.

Help should be obtained from the required course in Child Psychology for elementary teachers and Adolescent Psychology for secondary teachers. Mayhap these courses need to be improved. The supervisor of student teaching should be responsible in this case.

Educational Psychology which deals with the learning process is a re-course. The addition of a course in Tests and Measurements may help solve the problem.

A study of the curriculum involves the theory of all school subjects. In the case of #1 a philosophy of the curriculum might be emphasized.

Teaching strategies should be included in all methods courses.

The foregoing are incorporated in teacher certification requirements. Two additions have been suggested in the framework namely those attached to numbers 3 and 4.

The sixth question deals with COMPETENCE.

If this cannot be taken care of through interviews, examinations and on-the-job description then this might well be the work of the Agency for Licensing which board was suggested by Dr. Koerner. The addition mentioned by Dr. Gaige is necessary.

Institutions might contribute greatly to the competence by improving themselves. This is or can be done through membership or acceptance by crediting agencies. Members of the AACTE keep interest in the field through research in education which when reported is published in the bulletin put out by this organization. Members in this organization encourage colleges to enter projects each year for improving teacher education.

Regarding the interim certificate. There is a risk that must be taken for the best. This would involve much paper work etc. Do doctors, nurses, autoists-(drivers) receive an interim license and the...?

QUESTIONNAIRES RESULTS AND RELATED STATISTICS

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION

"STUDY OF TEACHER EDUCATION AND CERTIFICATION"

182 Tremont Street
Boston, Massachusetts 02111

Interview Guide for Teacher Education Institutions

Instructions: This Interview Guide is being provided in advance of scheduled interviews to permit the time and consultation that may be necessary to obtain the information requested. Please respond in terms of major programs and procedures. Alternatives can be described if considered important. The interview is intended to clarify and supplement the information provided.

Name of Institution Summary of Reports from Forty Institutions

Address _____

Person Interviewed _____

Title _____

Interviewer Dr. Lindley Stiles, Dr. Lawrence Fox,
Dr. Phyllis Devine, and Mr. Albert Mayers

1. Type of Institution:

- a. 7 University b. 8 Multi-purpose college
c. 15 Liberal arts college d. 4 Teachers' college
e. 4 Specialized institution (type) Communications, Bible,
Early Childhood Education

2. Institutional affiliation: (Check a or b and c if it applies)

- a. 10 Public
b. 27 Non-public
c. 4 Parochial

3. Enrollments:

- a. 130,527 Total
b. 104,960 Undergraduate
c. 25,567 Graduate
d. 23,140 Extension and/or evening program

4. Number of prospective teachers enrolled:
- a. 27,769 in undergraduate or four-year programs
- b. 5,707 in graduate, e.g. MAT type programs
5. Enrollments of experienced educational personnel:
- a. 5,846 in graduate programs
- b. 8,362 in extension and/or evening programs
- c. 6,299 during 1967 summer sessions
6. Number of beginning teachers produced in past five years (1962-63 -- 1966-67):
- a. 9,033 Secondary - with bachelor's degree
- b. 3,331 Secondary with fifth year or master's degree
- c. 10,726 Elementary - with bachelor's degree
- d. 1,677 Elementary with fifth year or master's degree
7. Organization for teacher education: (Below general institutional faculty level)
- a. School or college of education-- 15 undergraduate
10 graduate
- b. Department of education 25 in liberal arts college
6 in another college
- (name) Music, Psychology, Graduate
School of Arts and Sciences
8. Who is responsible for making policy for teacher education? (Below the level of the general faculty of the institution)
- a. 11 An interdisciplinary body in which academic professors are in the majority
- b. 7 A body in which representation is about equal between professors of education and academic professors
- c. 19 The faculty of the department of school (college) of education in which professors of education are in the majority
- d. 7 Other Council on Teacher Education, Faculty of Division, Administration of College

9. Who advises students preparing for teaching: (with respect to programs)

- Secondary a. 19 Academic professors in major fields
b. 21 Education professors
c. 16 Dual professors affiliated with both academic fields
and department or school of education
- Elementary d. 11 Academic professors in major fields
e. 30 Education professors
f. 8 Dual professors

10. What are standards for admission to teacher education programs? (check all that apply)

- a. 14 High school grade average (indicate) _____
b. 15 College Board Scores (cut off point) _____
c. 19 College grade point average (indicate) _____
d. 18 Health and personal adjustment (list measures) _____
-
- e. 17 Other No formal standards, Recommendation of Professors, general success in first 2 years, interview, judgement of maturity

11. How do students preparing to teach compare academically with other students in the institution?

- a. 28 Generally representative of total student body
b. 4 Come only from upper 75% of student body
c. 4 Come only from upper 50% of student body
d. 3 Come only from upper 25% of student body
e. 1 Other

12. How do students in institution compare with total college population of the nation?

- a. 22 Generally representative d. _____ Other
b. 15 Better than average
c. _____ Below the average

13. What is the distribution of emphasis in undergraduate teacher education programs? (Report for program most students follow)

For secondary school teachers:

- a. 55 % liberal arts or general education
- b. 33 % specialization in teaching field
- c. 17 % professional education courses (including clinical experience)

For elementary school teachers:

- d. 59 % liberal arts or general background
- e. 22 % specialization in a major
- f. 25 % professional education courses

14. How many hours are required for a major? (list fields and amount)

<u>Secondary fields</u>	<u>Minimum semester hours</u>
English	<u>32</u>
Speech	<u>31</u>
Mathematics	<u>31</u>
Social Studies	<u>35</u>
History	<u>31</u>
Geography	<u>27</u>
Foreign Language	<u>31</u>
Art	<u>38</u>
Music	<u>47</u>
Home Economics	<u>31</u>
Agriculture	<u>15</u>
Industrial Arts	<u>45</u>
Health and Physical Education	<u>24</u>
Business Education	<u>33</u>
Science	<u>34</u>
Others _____	<u>34</u>

<u>Elementary fields</u>	
In one major (academic)	<u>28</u>
In each field of a distributive major	<u>19</u>
Other _____	<u> </u>

15. How many fields do secondary school teachers prepare to teach?
(Average)
- a. 1 Typical number
 - b. 1 Minimum number
 - c. 2 Maximum number

16. Are all prospective elementary teachers required to complete a major in an academic subject field?
- a. 15 Yes
- b. 22 No
- c. _____ If yes, list typical choices: Psychology, English, History, Math,
Social Studies, Sociology, French,
Science, Music, Art, Theology
17. Indicate the duration of the student teaching or internship:
- a. 6 1/2 hours per day for 10 weeks
- B. Other
18. How are laboratory stations for student teaching or the internship obtained?
- a. 9 In a campus laboratory school operated by the institution
- b. 6 In a regular school with which the institution maintains a formal contractual arrangement.
- c. 33 Through annual negotiations with cooperating schools
- d. 5 Other Informal Arrangements
19. Are cooperating teachers paid by the preparing institution?
- a. 9 Yes -- How much per student teacher? _____
- b. 28 No
- c. 6 Other perquisites
- d. Indicate problems involved in above arrangements (1 indicated problems)
20. Do interns receive a stipend from the school system?
- a. 3 Yes -- Amount per semester? _____
- b. 31 No
- c. 1 Other arrangements

21. Who judges success in student teaching or internship?

- a. 4 Representative of preparing institution
- b. 2 Cooperating teacher in school
- c. 37 Both college and school personnel
- d. _____ Other

22. How is qualification for teaching judged?

- a. 28 By successful completion of required courses (including student teaching and the internship)
- b. 16 By completion of required courses with prescribed grade-point average -- Indicate: Over-all _____
Major _____
Education _____
- c. 4 By special examination and judged success in student teaching and/or internship --
Nature of examinations:
- d. 3 Other

23. Where are prospective teachers prepared to deal with the psychological and sociological problems of culturally disadvantaged students:

- a. 17 In liberal arts courses -- Indicate which Examples are:
1) Sociology 2) Social Work 3) English 4) History
5) Philosophy 6) Psychology 7) Economics
- b. 5 In major field courses -- Indicate which Examples mostly in
sociology or education majors. _____

- c. 23 In professional education courses -- Indicate Courses are
mostly in the areas of methodology, psychology, and philosophy

- d. 16 In the student teaching or internship -- Indicate how.
1) Student teachers assigned to inner-city schools 2) Contact with METCO pupils 3) Seminars during student teaching experience
4) Contact with resource persons from areas with large numbers of disadvantaged youths.

e. Other (2)

24. Where are prospective teachers prepared to understand international developments:

- a. 32 In liberal arts courses -- Indicate which Found mostly in the various
social sciences and English
- b. 8 In major field courses -- Indicate various social science courses
- c. 9 In professional education courses -- Indicate Found mostly in methods
courses, philosophical foundations of education courses, and comparative
education courses
- d. 3 In the student teaching or internship -- Indicate how.
In the area of the social sciences.
- e. 3 Other speeches and seminars

25. In which fields are the new curricula being employed? Which system or systems?

- a. 15 Biology BSCS; BSSE; Molecular Approach
- b. 13 Physics PSSC
- c. 7 Chemistry CBA; Chem Study
- d. 21 Math Eclectic; MSG, U. of Ill. Program; Suppes' Arith. Proj.; Modern
Math; CUPM; UMAP
- e. 18 Reading ITA; Programmed Reading, Spaulding Method, Lang. Exp.
- f. 10 Social Studies EDC Program
- g. 16 Foreign Lang. Audio-Lingual; FLES
- h. 7 English Clin. Meth; Transformational Grammar; Linguistics
- i. 10 Language Arts Linguistics; Sounds and Patterns of Language
- j. 11 Elem. Science EDC; Process Approach; U. of Ill.; SCIS; AAAS; ESS; ESCP;
- k. 8 Others Directed Field Exp.; Exp. in Micro-Teaching; Early Childhood Ed.;
IPS; Team Teaching; Sex Education; Music; Montessori

26. What is the cost to the institution to educate individuals preparing for teaching?

a. \$1.175 Average per-student cost.

b. \$4,477 Approximate total per-student cost for four years of preparation.

27. What plans are underway to improve programs of teacher education? Review of curriculum (academic and professional), establishment of lab schools, improvement of student teaching, development of internship programs, involvement with public schools, use of new technology and training, and establishment of interdisciplinary committees on teacher education.

28. Would your institution welcome leadership from the State Department of Education to improve teacher education in Massachusetts?

a. 33 Yes If yes, what kind of help is most desired? Leadership in improvement and enforcement of certification, cooperative leadership with institutions, and assistance in student teaching and internship programs.

b. 3 No

29. Suggestions for standards for teacher education in all Massachusetts institutions

Greater emphasis on academic background, improvement of student teaching, increase admissions requirements, and allow for program approval by institutions.

30. Suggestions for improving certification of teachers

Eliminate prescribed number of credit hours; provisional and other levels of certification; reciprocity; qualitative and quantitative improvement of student teaching experience, increased work in major; training for cooperating teachers, financial aid for student teaching; cooperative development of certification requirements; examinations in subject field; periodic renewal of certificates; program approval; new areas of certification such as Head Start.

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION
"Study of Teacher Education and Certification"
182 Tremont Street
Boston, Massachusetts, 02111

Questionnaire for School Administrators

- - - - -

The Massachusetts Advisory Council on Education is conducting a study of teacher education and certification. The objective is to identify desirable improvements and to propose long-range goals to appropriate agencies and institutions. As an employer of teachers your views and experience offer important help to identify the key problems as well as possible solutions. Will you please assist the Council by answering the following brief questionnaire and returning it in the self-addressed stamped envelope.

- - - - -

Name Totals or Averages of 190 Questionnaires

Position _____

Address _____

- - - - -

1. In the past five years, have you been able to fill all teaching positions in your school system with teachers fully certified by the State of Massachusetts?

a. 14 Yes

b. 176 No

2. If the answer to question was "No", approximately what percentage of positions had to be filled with teachers holding temporary permits or waivers.

a. 6.33 % for elementary schools

b. 7.74 % for junior and senior high schools

c. Please list high school fields in which shortages were most acute

Physics, Chemistry, Biology, Reading, Industrial Arts

French, Mathematics, English, Girls' Physical

Education, Business Education, Art, Special Education

3. Do you now employ para-professional personnel (e. g. teacher aids, lay readers, instructional secretaries, etc) to help with instructional duties?

a. 89 Yes

b. 97 No

4. If the answer to question 3 was "Yes", please check type and indicate below the approximate number in each category.

<u>Type</u>	<u>Approximate Number</u>
a. <u>73</u> Teacher aids	_____
b. <u>11</u> Lay readers	_____
c. <u>17</u> Instructional secretaries	_____
d. <u>25</u> Interns in training	_____
e. <u>18</u> Other: _____	_____
_____	_____
_____	_____

5. Approximately what percentages of teachers in your school system had to be given assignments last year, 1966-67, for which they were not well prepared?

a. 3.9 % teaching subjects in which they had not majored in college

b. 2.5 % teaching at levels, e. g. elementary or secondary at which they were unprepared

c. 3.8 % whose preparation did not prepare adequately for the sociological and psychological backgrounds of students

d. N/A % Other only two reported other 15% and 5% respectively

6. Approximately what percentages of students in your school system were under the instruction last year, 1966-67, of teachers who were not fully certified teachers?

a. 2.9 % in elementary schools

b. 6.8 % in secondary schools

7. Are the teachers available for employment in your school or system prepared --
(Check all for which the answer is "yes")
- a. 120 to deal effectively with the cultural and psychological differences of various types of students, including those of minority and economically disadvantaged families
 - b. 120 to translate rapidly expanding new knowledge into school programs of instruction
 - c. 112 to make effective use of instructional technology in their teaching
8. Are the beginning teachers you employ ready to take full responsibility for teaching?
- a. 124 Yes
 - b. 53 No
9. If the answer to question 8 is "No", in which ways are they unprepared?
- a. 39 In knowledge about learning and teaching
 - b. 54 In experience in managing a class group
 - c. 18 In knowledge of the content to be taught
 - d. 53 In understanding of psychological and sociological differences in children
 - e. 15 Other _____
-
10. What does your school system do to help beginning teachers adjust to their assignments? (Check all that apply)
- a. 181 Provide supervisory assistance
 - b. 60 Assign beginning teachers to work in instructional teams where they have the help of master teachers
 - c. 129 Provide in-service training
 - d. 43 Other _____
-
11. How do experienced teachers in your school system keep abreast of new knowledge and teaching techniques? (Check all that apply)
- a. 149 Through in-service programs provided by the school system
 - b. 182 By enrolling in extension and summer courses offered by colleges and universities
 - c. 73 Through leaves-of-absences for full-time study

11. (Continued) How do experienced teachers in your school system keep abreast of new knowledge and teaching techniques? (Check all that apply)
- d. 67 Largely by independent study
- e. 31 Other _____
12. What percentages of the teachers in your system were enrolled in in-service training courses last year.
- a. 30.0 % of secondary school teachers
- b. 27.0 % of elementary school teachers
13. In which fields are the new curricula being employed? Which system or systems?
- a. 130 Biology _____
- b. 122 Physics _____
- c. 102 Chemistry _____
- d. 132 Math _____
- e. 103 Reading _____
- f. 39 Social Studies _____
- g. 69 Foreign Languages _____
- h. 47 English _____
- i. 29 Language Arts _____
- j. 68 Elementary Science _____
- k. _____ Others _____
14. Does your school system maintain its own qualifications for teaching?
- a. 139 Yes
- b. 41 No
15. If the answer to question 14 was yes, which factors are considered? (Check all that apply)
- a. 7 Demonstrated competence on written exams
- b. 2 Residence in city or town
- c. 102 Previous experience

15. (Continued) If the answer to question 14 was yes, which factors are considered? (Check all that apply)

d. 104 College preparation

e. 56 Other

MASSACHUSETTS ADVISORY COUNCIL ON EDUCATION
"Study of Teacher Education and Certification"

182 Tremont Street
Boston, Massachusetts 02111

ATTITUDES INVENTORY

The Massachusetts Advisory Council on Education is conducting a study of teacher education and certification. The objective is to identify desirable improvements and to propose long-range goals to appropriate agencies and institutions. Important to the Council are the attitudes of key leaders in education and other organizations concerned with the quality of schools. As such a person, will you please help by answering the following questions.

1. From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?
(Check the appropriate column)

	<u>Strongly influence</u>	<u>Moderately influence</u>	<u>Slightly influence</u>
a. Professional image	_____	_____	_____
b. Teachers' salaries	_____	_____	_____
c. Certification standards	_____	_____	_____
d. Working conditions	_____	_____	_____
e. Programs of preparation	_____	_____	_____
f. Opportunities for innovation	_____	_____	_____
g. Location	_____	_____	_____
h. Political pressures	_____	_____	_____
i. Size of community	_____	_____	_____
j. Other	_____	_____	_____

2. Do you feel that the following existing minimum requirements are adequate for teacher certification?

- a. Eighteen semester hours in Education for Elementary majors

1) _____ Yes

2) _____ No

2. (Continued) Do you feel that the following existing minimum requirements are adequate for teacher certification?

b. Twelve semester hours in Education for Secondary majors

1) _____ Yes

2) _____ No

c. Two semester hours in practice teaching for Elementary and Secondary majors

1) _____ Yes

2) _____ No

d. Nine semester hours in minor subject area for Secondary majors

1) _____ Yes

2) _____ No

e. Eighteen semester hours in major subject area for Secondary majors

1) _____ Yes

2) _____ No

3. If any of the answers to question 2 were "N", where were weaknesses most noticeable?

a. _____ In liberal arts background

b. _____ In subject field specialization

c. _____ In knowledge about education and its processes

d. _____ In the development of teaching skill

e. _____ Other _____

4. Do you feel that the following existing prerequisites for teacher certification in Massachusetts are necessary?

a. American citizenship

1) _____ Yes

2) _____ No

4. (Continued) Do you feel that the following existing prerequisites for teacher certification in Massachusetts are necessary?

b. Sound moral character

1) _____ Yes

2) _____ No

c. Proof of good health

1) _____ Yes

2) _____ No

5. If any of the answers to question 4 were "No", why do you feel that they are not necessary? (Answer on the corresponding a., b., or c.)

a. _____

b. _____

c. _____

6. Should the State Department of Education continue a system of Certification of Teachers?

a. _____ No

b. _____ Yes

c. _____ Yes, with improvements

7. From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with new knowledge and professional techniques?

	<u>Strongly influence</u>	<u>Moderately influence</u>	<u>Slightly influence</u>
a. Tenure standards	_____	_____	_____
b. Salary policies	_____	_____	_____
c. Policies of professional associations	_____	_____	_____
d. Local in-service workshops	_____	_____	_____
e. NDEA institutes	_____	_____	_____

7. (Continued) From your experience, to what degree do the following influence in-service teachers to keep up-to-date with new knowledge and professional techniques?

	<u>Strongly influence</u>	<u>Moderately influence</u>	<u>Slightly influence</u>
f. Individual initiative by teachers	_____	_____	_____
g. Local resource persons	_____	_____	_____
h. State certification policies	_____	_____	_____
i. Other _____	_____	_____	_____

8. Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

a. Provide flexibility in the way personnel are certified (in contrast to rigid across-the-board paper requirements for everybody)

1) _____ Yes

2) _____ No

b. Provide for the certification of an applicant in a specified field or area, largely on the recommendation of the preparing college in a program which is approved by the State Department of Education

1) _____ Yes

2) _____ No

c. Provide as an alternate plan, the possibility of certification by examination

1) _____ Yes

2) _____ No

d. Require all public school teachers including pre-1951 teachers to become certified

1) _____ Yes

2) _____ No

e. Require that all teachers become certified before being hired

1) _____ Yes

2) _____ No

3
2
4

8. (Continued) Do you feel that the following would lead to an improvement of teacher certification?

f. Make the completion of a successful apprenticeship (beyond student teaching) prerequisite to full certification as a professional teacher

1) _____ Yes

2) _____ No

g. Provide a type of recognition for master teachers who prove themselves outstanding on the job

1) _____ Yes

2) _____ No

h. Require the periodic renewal of teaching certificates on the basis of keeping up with new knowledge and professional techniques

1) _____ Yes

2) _____ No

i. Provide for the establishment of a representative body (classroom teachers, scholars in a field, specialists in education, administrators, and layment) delegated authority by the State Department of Education to approve teacher education programs, constantly evaluate certification policies and act upon individual cases

1) _____ Yes

2) _____ No

j. Provide for the centralization of all certification, e.g. adult civic education, adult basic education and vocational education in one department or board

1) _____ Yes

2) _____ No

k. Reduce the number of certificates to general categories such as administrative, teaching, and special school service personnel with appropriate endorsements in areas of specialization

1) _____ Yes

2) _____ No

8. (Continued) Do you feel that the following would lead to an improvement of teacher certification?

1. Initiate a system of nationwide reciprocity on the basis of teacher preparation programs approved through colleges and accredited by a nationwide agency

1) _____ Yes

2) _____ No

9. Which kinds of public school personnel should have state certification?

a. _____ Classroom teachers (elementary and secondary)

b. _____ Para-professional personnel, e.g. teacher aids, lay readers, interns in training, etc.

c. _____ Supervisors and specialists in curriculum and instruction

d. _____ Principals

e. _____ Superintendents

f. _____ Guidance counselors

g. _____ Audio-visual specialists

h. _____ Supervisors of student teaching

i. _____ School psychologists

j. _____ Teachers of the handicapped

k. _____ Substitute teachers

l. _____ Teachers of adult and vocational education

m. _____ Tax supported junior college teachers

n. _____ Kindergarten teachers (certified separately from elementary or secondary teachers)

o. _____ Junior high teachers (certified separately from elementary or secondary teachers)

p. _____ Other _____

10. Should parochial and other non-public teachers be included in State certification?

a. _____ Yes

b. _____ No

11. Certain other professions have developed procedures for admission, continuation, or advancement in professional status. These may or may not be linked to legal licensing procedures. Do you feel that the teaching profession in Massachusetts should take greater responsibility to develop standards and procedures for the admission and maintenance of professional status in teaching?

a. _____ Yes

b. _____ No

12. In terms of intellectual and scholarly capacities, prospective teachers should be drawn from: (Check your preference as the ideal.)

a. _____ The total college population of the nation

b. _____ The upper half of the college population of the nation

c. _____ The upper one-fourth of the college population of the nation

d. _____ Other

13. Should programs of preparation for teaching place greater emphasis on: (Rate in order of importance: 1, 2, 3, etc. Use each number only once.)

a. Liberal arts background	1	2	3	4
----------------------------	---	---	---	---

b. Specialization in teaching field	1	2	3	4
-------------------------------------	---	---	---	---

c. Study about education	1	2	3	4
--------------------------	---	---	---	---

d. Supervised practice in teaching (e.g., in student teaching or the internship)	1	2	3	4
--	---	---	---	---

14. A key problem of institutions that prepare teachers is obtaining suitable situations and conditions for student teaching or the internship. Should the State Department of Education, the preparing institutions and the schools of the state create a mechanism to make such resources available to all preparing institutions--both public and non-profit?

a. _____ By paying the cost of the time of teachers who supervise student teachers or interns

b. _____ By scheduling the orderly use of school resources by various teacher preparing institutions

c. _____ Other _____

15. Please indicate on the reverse side of this sheet other suggestions for the improvement of teacher education and certification of teachers of Massachusetts.

QUESTION I: From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?

Table 1 A: Professional Image

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	112	90	21
SUPERVISORS	41	44	6
PRINCIPALS-PUBLIC ELEM.	62	59	14
PRINCIPALS-PUBLIC SEC.	47	47	10
TEACHERS-PUBLIC ELEM.	65	57	18
TEACHERS-PUBLIC SEC.	40	49	14
PRINICPALS-PAROCHIAL	31	29	3
TEACHERS-PAROCHIAL	56	60	7
SCHOOL COM. CHAIRMEN	25	29	12
P.T.A. PRESIDENTS	10	8	4
COLLEGE TEACHERS-ED.	32	30	13
COLLEGE TEACHERS-LIB. ARTS	35	26	8
STATE DEPT. OF ED. PERSONNEL	<u>23</u>	<u>11</u>	<u>3</u>
TOTAL	579	539	133

Table 1 B: Teacher's Salaries

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	187	41	1
SUPERVISORS	69	17	5
PRINCIPALS-PUBLIC ELEM.	103	27	6
PRINCIPALS-PUBLIC SEC.	81	24	1
TEACHERS-PUBLIC ELEM.	104	30	8
TEACHERS-PUBLIC SEC.	76	17	10
PRINCIPALS-PAROCHIAL	49	9	4
TEACHERS-PAROCHIAL	92	25	7
COLLEGE TEACHERS-ED.	41	32	2
COLLEGE TEACHERS-LIB. ARTS	49	17	3
STATE DEPT. OF ED. PERSONNEL	30	6	2
SCHOOL COM. CHAIRMEN	47	16	3
P.T.A. PRESIDENTS	<u>18</u>	<u>5</u>	<u>1</u>
TOTAL	946	266	53

QUESTION I: From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?

Table 1 C: Certification Standards

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	45	121	62
SUPERVISORS	20	42	25
PRINCIPALS-PUBLIC ELEM.	29	74	31
PRINCIPALS-PUBLIC SEC.	22	60	23
TEACHERS-PUBLIC ELEM.	26	81	31
TEACHERS-PUBLIC SEC.	22	56	24
PRINCIPALS-PAROCHIAL	26	29	8
TEACHERS-PAROCHIAL	47	61	17
SCHOOL COM. CHAIRMEN	5	32	27
P.T.A. PRESIDENTS	8	13	3
COLLEGE TEACHERS-ED.	14	31	31
COLLEGE TEACHERS- LIBERAL ARTS	18	33	19
STATE DEPT. OF ED. PERSONNEL	<u>11</u>	<u>19</u>	<u>8</u>
TOTAL	293	652	69

TABLE I D: Working Conditions

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	148	78	3
SUPERVISORS	65	25	1
PRINCIPALS-PUBLIC ELEM.	98	34	8
PRINCIPALS-PUBLIC SEC.	68	35	2
TEACHERS-PUBLIC ELEM.	107	21	14
TEACHERS-PUBLIC SEC.	67	28	8
PRINCIPALS-PAROCHIAL	32	25	6
TEACHERS-PAROCHIAL	57	61	7
SCHOOL COM. CHAIRMEN	33	30	3
P.T.A. PRESIDENTS	14	10	0
COLLEGE TEACHERS-ED.	41	27	8
College TEACHERS- LIBERAL ARTS	42	24	4
STATE DEPARTMENT OF ED. PERSONNEL	<u>18</u>	<u>15</u>	<u>5</u>
TOTAL	783	413	69

QUESTION I: From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?

Table 1 E: Programs of Preparation

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	83	125	16
SUPERVISORS	27	53	8
PRINCIPALS-PUBLIC ELEM.	38	83	12
PRINCIPALS-PUBLIC SEC.	32	60	11
TEACHERS-PUBLIC ELEM.	43	75	20
TEACHERS-PUBLIC SEC.	29	53	17
PRINCIPALS-PAROCHIAL	25	34	3
TEACHERS-PAROCHIAL	46	68	7
SCHOOL COM. CHAIRMEN	11	44	10
P.T.A. PRESIDENTS	4	17	3
COLLEGE TEACHERS-ED.	38	35	3
COLLEGE TEACHERS- LIBERAL ARTS	26	29	11
STATE DEPT. OF ED. PERSONNEL	<u>15</u>	<u>20</u>	<u>1</u>
TOTAL	417	696	122

Table 1 F: Opportunities for Innovation

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	70	119	37
SUPERVISORS	30	48	12
PRINCIPALS-PUBLIC ELEM.	46	73	15
PRINCIPALS-PUBLIC SEC.	30	61	15
TEACHERS-PUBLIC ELEM.	62	58	19
TEACHERS-PUBLIC SEC.	34	54	15
PRINCIPALS-PAROCHIAL	16	39	8
TEACHERS-PAROCHIAL	39	63	23
SCHOOL COM. CHAIRMEN	16	31	19
P.T.A. PRESIDENTS	4	15	5
COLLEGE TEACHERS-ED.	27	34	14
COLLEGE TEACHERS- LIBERAL ARTS	26	30	11
STATE DEPT. OF ED. PERSONNEL	<u>10</u>	<u>19</u>	<u>7</u>
TOTAL	410	644	200

QUESTION I: From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?

Table 1 G: Location

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	141	75	12
SUPERVISORS	44	35	12
PRINCIPALS-PUBLIC ELEM.	85	41	10
PRINCIPALS-PUBLIC SEC.	64	34	7
TEACHERS-PUBLIC ELEM.	75	44	21
TEACHERS-PUBLIC SEC.	32	51	19
PRINCIPALS-PAROCHIAL	14	34	15
TEACHERS-PAROCHIAL	49	51	25
SCHOOL COM. CHAIRMEN	38	22	6
P.T.A. PRESIDENTS	11	11	1
COLLEGE TEACHERS-ED.	39	28	9
COLLEGE TEACHERS- LIBERAL ARTS	37	23	9
STATE DEPT. OF ED. PERSONNEL	<u>12</u>	<u>21</u>	<u>5</u>
TOTAL	642	470	151

Table 1 H: Political Pressures

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	27	63	135
SUPERVISORS	13	30	47
PRINCIPALS-PUBLIC ELEM.	23	33	75
PRINCIPALS-PUBLIC SEC.	18	35	47
TEACHERS-PUBLIC ELEM.	21	38	79
TEACHERS-PUBLIC SEC.	19	32	51
PRINCIPALS-PAROCHIAL	3	30	27
TEACHERS-PAROCHIAL	17	45	50
SCHOOL COM. CHAIRMEN	7	10	48
P.T.A. PRESIDENTS	7	5	12
COLLEGE TEACHERS-ED.	14	22	37
COLLEGE TEACHERS- LIBERAL ARTS	15	27	25
STATE DEPT. OF ED. PERSONNEL	<u>4</u>	<u>9</u>	<u>23</u>
TOTAL	188	379	666

QUESTION I: From your experience, to what degree do the following items influence the supply of quality teachers in Massachusetts?

Table 1 I: Size of Community

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	31	142	53
SUPERVISORS	16	46	28
PRINCIPALS-PUBLIC ELEM.	24	68	42
PRINCIPALS-PUBLIC SEC.	19	56	38
TEACHERS-PUBLIC ELEM.	29	71	39
TEACHERS-PUBLIC SEC.	21	45	37
PRINCIPALS-PAROCHIAL	9	30	23
TEACHERS-PAROCHIAL	28	62	35
SCHOOL COM. CHAIRMEN	14	35	17
P.T.A. PRESIDENTS	3	11	9
COLLEGE TEACHERS-ED.	10	43	18
COLLEGE TEACHERS-LIB. ARTS	13	39	15
STATE DEPT. OF ED. PERSONNEL	<u>5</u>	<u>19</u>	<u>12</u>
TOTAL	222	667	356

Table 1 J: Other

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	14	6	2
SUPERVISORS	7	1	0
PRINCIPALS-PUBLIC ELEM.	6	3	0
PRINCIPALS-PUBLIC SEC.	7	0	0
TEACHERS-PUBLIC ELEM.	6	6	3
TEACHERS-PUBLIC SEC.	7	2	2
PRINCIPALS-PAROCHIAL	1	2	1
TEACHERS-PAROCHIAL	5	3	1
SCHOOL COM. CHAIRMEN	6	2	0
P.T.A. PRESIDENTS	1	0	0
COLLEGE TEACHERS-ED.	5	0	0
COLLEGE TEACHERS-LIB, ARTS	7	1	1
STATE DEPT. OF ED. PERSONNEL	<u>1</u>	<u>0</u>	<u>0</u>
TOTAL	73	26	10

QUESTION II: Do you feel that the following existing minimum requirements are adequate for teacher certification?

Table 2 A: 18 Semester Hours in Education for Elementary Majors

Classification	Yes	No
SUPERINTENDENTS	177	48
SUPERVISORS	59	26
PRINCIPALS-PUBLIC ELEM.	98	37
PRINCIPALS-PUBLIC SEC.	78	20
TEACHERS-PUBLIC ELEM.	108	28
TEACHERS-PUBLIC SEC.	92	9
PRINCIPALS-PAROCHIAL	56	7
TEACHERS-PAROCHIAL	98	26
SCHOOL COM. CHAIRMEN	52	13
P.T.A. PRESIDENTS	10	12
COLLEGE TEACHERS-ED.	36	37
COLLEGE TEACHERS-LIB. ARTS	57	9
STATE DEPT. OF ED. PERSONNEL	19	19
TOTAL	940	289

Table 2 B: 12 Semester Hours in Education for Secondary Majors

Classification	Yes	No
SUPERINTENDENTS	158	65
SUPERVISORS	53	31
PRINCIPALS-PUBLIC ELEM.	62	59
PRINCIPALS-PUBLIC SEC.	70	34
TEACHERS-PUBLIC ELEM.	82	52
TEACHERS-PUBLIC SEC.	84	18
PRINCIPALS-PAROCHIAL	46	16
TEACHERS-PAROCHIAL	82	42
SCHOOL COM. CHAIRMEN	43	19
P.T.A. PRESIDENTS	9	13
COLLEGE TEACHERS-ED.	27	43
COLLEGE TEACHERS-LIB. ARTS	56	12
STATE DEPT. OF ED. PERSONNEL	16	20
TOTAL	788	424

QUESTION II: Do you feel that the following existing minimum requirements are adequate for teacher certification?

Table 2 C: 2 Semester Hours in Practice Teaching for Elementary and Secondary Majors

Classification	Yes	No
SUPERINTENDENTS	78	144
SUPERVISORS	27	61
PRINCIPALS-PUBLIC ELEM.	34	97
PRINCIPALS-PUBLIC SEC.	48	54
TEACHERS-PUBLIC ELEM.	52	87
TEACHERS-PUBLIC SEC.	55	78
PRINCIPALS-PAROCHIAL	33	30
TEACHERS-PAROCHIAL	57	59
SCHOOL COM. CHAIRMEN	21	41
P.T.A. PRESIDENTS	4	18
COLLEGE TEACHERS-ED.	3	68
COLLEGE TEACHERS-LIB. ARTS	38	30
STATE DEPT. OF ED. PERSONNEL	<u>7</u>	<u>30</u>
TOTAL	467	767

Table 2 D: 9 Semester Hours in Minor Subject Area for Secondary Major

Classification	Yes	No
SUPERINTENDENTS	85	137
SUPERVISORS	50	33
PRINCIPALS-PUBLIC ELEM.	70	46
PRINCIPALS-PUBLIC SEC.	40	62
TEACHERS-PUBLIC ELEM.	100	34
TEACHERS-PUBLIC SEC.	61	42
PRINCIPALS-PAROCHIAL	46	16
TEACHERS-PAROCHIAL	86	40
SCHOOL COM. CHAIRMEN	37	25
P.T.A. PRESIDENTS	11	11
COLLEGE TEACHERS-ED.	8	62
COLLEGE TEACHERS-LIB. ARTS.	24	43
STATE DEPT. OF ED. PERSONNEL	<u>13</u>	<u>24</u>
TOTAL	631	575

QUESTION II: Do you feel that the following existing minimum requirements are adequate for teacher certification?

Table 2 E: 18 Semester Hours in Major Subject Area for Secondary Majors.

Classification	Yes	No
SUPERINTENDENTS	105	81
SUPERVISORS	54	15
PRINCIPALS-PUBLIC ELEM.	81	25
PRINCIPALS-PUBLIC SEC.	43	41
TEACHERS-PUBLIC ELEM.	84	17
TEACHERS-PUBLIC SEC.	50	26
PRINCIPALS-PAROCHIAL	31	6
TEACHERS-PAROCHIAL	58	17
SCHOOL COM. CHAIRMEN	37	12
P.T.A. PRESIDENTS	14	5
COLLEGE TEACHERS-ED.	48	20
COLLEGE TEACHERS-LIB. ARTS	32	26
STATE DEPT. OF ED. PERSONNEL	<u>23</u>	<u>12</u>
TOTAL	660	303

QUESTION III: If any of the answers to question 2 were "no", where were weaknesses most noticeable?

Table 3A: In Liberal Arts

Classification	Yes
SUPERINTENDENTS	81
SUPERVISORS	15
PRINCIPALS-PUBLIC ELEM.	25
PRINCIPALS-PUBLIC SEC.	41
TEACHERS-PUBLIC ELEM.	17
TEACHERS-PUBLIC SEC.	26
PRINCIPALS-PAROCHIAL	6
TEACHERS-PAROCHIAL	17
SCHOOL COM. CHAIRMEN	12
P.T.A. PRESIDENTS	5
COLLEGE TEACHERS-ED.	20
COLLEGE TEACHERS-LIB. ARTS	26
STATE DEPT. OF ED. PERSONNEL	<u>12</u>
TOTAL	303

QUESTION III: If any of the answers to question 2 were "no", where were weaknesses most noticeable?

Table 3 B: In Subject Field Specialization

Classification	Yes
SUPERINTENDENTS	122
SUPERVISORS	36
PRINCIPALS-PUBLIC ELEM.	35
PRINCIPALS-PUBLIC SEC.	64
TEACHERS-PUBLIC ELEM.	34
TEACHERS-PUBLIC SEC.	49
PRINCIPALS-PAROCHIAL	18
TEACHERS-PAROCHIAL	34
SCHOOL COM. CHAIRMEN	25
P.T.A. PRESIDENTS	11
COLLEGE TEACHERS-ED.	50
COLLEGE TEACHERS-LIB. ARTS	50
STATE DEPT. OF ED. PERSONNEL	<u>28</u>
TOTAL	556

Table 3 C: In Knowledge about Education and its Processes

Classification	Yes
SUPERINTENDENTS	73
SUPERVISORS	24
PRINCIPALS-PUBLIC ELEM.	48
PRINCIPALS-PUBLIC SEC.	26
TEACHERS-PUBLIC ELEM.	27
TEACHERS-PUBLIC SEC.	15
PRINCIPALS-PAROCHIAL	15
TEACHERS-PAROCHIAL	25
SCHOOL COM. CHAIRMEN	13
P.T.A. PRESIDENTS	7
COLLEGE TEACHERS-ED.	30
COLLEGE TEACHERS-LIB. ARTS	7
STATE DEPT. OF ED. PERSONNEL	<u>16</u>
TOTAL	326

QUESTION III: If any of the answers to question 2 were "no", where were weaknesses most noticeable?

Table 3 D: In the Development of Teaching Skill

Classification	Yes
SUPERINTENDENTS	127
SUPERVISORS	56
PRINCIPALS-PUBLIC ELEM.	90
PRINCIPALS-PUBLIC SEC.	47
TEACHERS-PUBLIC ELEM.	87
TEACHERS-PUBLIC SEC.	49
PRINCIPALS-PAROCHIAL	29
TEACHERS-PAROCHIAL	50
SCHOOL COM. CHAIRMEN	35
P.T.A. PRESIDENTS	14
COLLEGE TEACHERS-ED.	47
COLLEGE TEACHERS-LIB. ARTS	23
STATE DEPT. OF ED. PERSONNEL	<u>45</u>
TOTAL	679

Table 3 E: Other

Classification	Yes
SUPERINTENDENTS	16
SUPERVISORS	4
PRINCIPALS-PUBLIC ELEM.	6
PRINCIPALS-PUBLIC SEC.	6
TEACHERS-PUBLIC ELEM.	9
TEACHERS-PUBLIC SEC.	5
PRINCIPALS-PAROCHIAL	1
TEACHERS-PAROCHIAL	2
SCHOOL COM. CHAIRMEN	4
P.T.A. PRESIDENTS	2
COLLEGE TEACHERS-ED.	6
COLLEGE TEACHERS-LIB. ARTS	2
STATE DEPT. OF ED. PERSONNEL	<u>2</u>
TOTAL	65

QUESTION IV: Do you feel that the following existing prerequisites for teacher certification in Massachusetts are necessary?

Table 4 A: American Citizenship

Classification	Yes	No
SUPERINTENDENTS	108	116
SUPERVISORS	56	31
PRINCIPALS-PUBLIC ELEM.	85	48
PRINCIPALS-PUBLIC SEC.	54	48
TEACHERS-PUBLIC ELEM.	91	51
TEACHERS-PUBLIC SEC.	40	62
PRINCIPALS-PAROCHIAL	42	21
TEACHERS-PAROCHIAL	79	46
SCHOOL COM. CHAIRMEN	25	40
P.T.A. PRESIDENTS	12	12
COLLEGE TEACHERS-ED.	27	46
COLLEGE TEACHERS-LIB. ARTS	15	54
STATE DEPT. OF ED. PERSONNEL	18	20
TOTAL	653	595

Table 4 B: Sound Moral Character

Classification	Yes	No
SUPERINTENDENTS	227	1
SUPERVISORS	88	4
PRINCIPALS-PUBLIC ELEM.	135	1
PRINCIPALS-PUBLIC SEC.	105	1
TEACHERS-PUBLIC ELEM.	139	2
TEACHERS-PUBLIC SEC.	101	3
PRINCIPALS-PAROCHIAL	63	0
TEACHERS-PAROCHIAL	125	1
SCHOOL COM. CHAIRMEN	63	4
P.T.A. PRESIDENTS	23	1
COLLEGE TEACHERS-ED.	60	10
COLLEGE TEACHERS-LIB. ARTS.	58	9
STATE DEPT. OF ED. PERSONNEL	35	3
TOTAL	1222	40

QUESTION IV: Do you feel that the following existing prerequisites for teacher certification in Massachusetts are necessary?

Table 4 C: Proof of Good Health

Classification	Yes	No
SUPERINTENDENTS	220	7
SUPERVISORS	87	4
PRINCIPALS-PUBLIC ELEM.	131	4
PRINCIPALS-PUBLIC SEC.	103	2
TEACHERS-PUBLIC ELEM.	132	11
TEACHERS-PUBLIC SEC.	91	12
PRINCIPALS-PAROCHIAL	58	5
TEACHERS-PAROCHIAL	109	16
SCHOOL COM. CHAIRMEN	58	9
P.T.A. PRESIDENTS	19	5
COLLEGE TEACHERS-ED.	64	11
COLLEGE TEACHERS-LIB. ARTS	62	7
STATE DEPT. OF ED. PERSONNEL	<u>35</u>	<u>3</u>
TOTAL	1169	96

QUESTION VI: Should the State Department of Education continue a system of certification of teachers?

Table 6:

Classification	No	Yes, as is	Yes, with Improvements
SUPERINTENDENTS	3	20	204
SUPERVISORS	2	15	74
PRINCIPALS-PUBLIC ELEM.	3	29	102
PRINCIPALS-PUBLIC SEC.	2	9	94
TEACHERS-PUBLIC ELEM.	2	41	100
TEACHERS-PUBLIC SEC.	4	29	68
PRINCIPALS-PAROCHIAL	0	26	37
TEACHERS-PAROCHIAL	2	46	77
SCHOOL COM. CHAIRMEN	2	10	54
COLLEGE TEACHERS-ED.	6	0	67
COLLEGE TEACHERS-LIB. ARTS	7	3	56
P.T.A. PRESIDENTS	0	2	20
STATE DEPT. OF ED. PERSONNEL	<u>0</u>	<u>1</u>	<u>36</u>
TOTAL	33	231	989

QUESTION VII: From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with new knowledge and professional techniques?

Table 7 A: Tenure Standards

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	41	72	104
SUPERVISORS	26	34	28
PRINCIPALS-PUBLIC ELEM.	38	51	43
PRINCIPALS-PUBLIC SEC.	35	34	34
TEACHERS-PUBLIC ELEM.	65	47	31
TEACHERS-PUBLIC SEC.	31	37	32
PRINCIPALS-PAROCHIAL	37	20	6
TEACHERS-PAROCHIAL	70	37	15
SCHOOL COM. CHAIRMEN	14	17	33
P.T.A. PRESIDENTS	10	8	4
COLLEGE TEACHERS-ED.	20	22	31
COLLEGE TEACHERS-LIB. ARTS	30	28	8
STATE DEPT. OF ED. PERSONNEL	<u>10</u>	<u>10</u>	<u>18</u>
TOTAL	427	417	387

Table 7 B: Salary Policies

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	168	54	5
SUPERVISORS	77	12	3
PRINCIPALS-PUBLIC ELEM.	103	27	6
PRINCIPALS-PUBLIC SEC.	77	27	2
TEACHERS-PUBLIC ELEM.	116	24	3
TEACHERS-PUBLIC SEC.	72	18	12
PRINCIPALS-PAROCHIAL	48	9	5
TEACHERS-PAROCHIAL	100	16	9
SCHOOL COM. CHAIRMEN	49	12	4
P.T.A. PRESIDENTS	20	2	1
COLLEGE TEACHERS-ED.	45	21	6
COLLEGE TEACHERS-LIB. ARTS	60	8	1
STATE DEPT. OF ED. PERSONNEL	<u>29</u>	<u>7</u>	<u>2</u>
TOTAL	964	237	59

QUESTION VII: From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with knowledge and professional techniques?

Table 7 C: Policies of Professional Associations

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	25	87	109
SUPERVISORS	21	40	29
PRINCIPALS-PUBLIC ELEM.	16	59	47
PRINCIPALS-PUBLIC SEC.	13	54	38
TEACHERS-PUBLIC ELEM.	25	60	52
TEACHERS-PUBLIC SEC.	18	50	35
PRINCIPALS-PAROCHIAL	14	37	12
TEACHERS-PAROCHIAL	25	65	34
SCHOOL COM. CHAIRMEN	7	22	36
P.T.A. PRESIDENTS	6	8	7
COLLEGE TEACHERS-ED.	0	42	31
COLLEGE TEACHERS-LIB. ARTS	6	38	23
STATE DEPT. OF ED. PERSONNEL	<u>5</u>	<u>18</u>	<u>14</u>
TOTAL	177	599	466

Table 7 D: Local In-Service Workshops

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	87	113	25
SUPERVISORS	31	42	17
PRINCIPALS-PUBLIC ELEM.	62	58	14
PRINCIPALS-PUBLIC SEC.	24	64	17
TEACHERS-PUBLIC ELEM.	56	57	31
TEACHERS-PUBLIC SEC.	21	51	30
PRINCIPALS-PAROCHIAL	27	31	5
TEACHERS-PAROCHIAL	40	66	19
SCHOOL COM. CHAIRMEN	27	24	14
P.T.A. PRESIDENTS	9	7	7
COLLEGE TEACHERS-ED.	24	37	12
COLLEGE TEACHERS-LIB. ARTS	13	37	15
STATE DEPT. OF ED. PERSONNEL	<u>13</u>	<u>16</u>	<u>9</u>
TOTAL	434	603	215

QUESTION VII: From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with knowledge and professional techniques?

Table 7 E: NDEA Institutes

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	84	103	38
SUPERVISORS	19	42	26
PRINCIPALS-PUBLIC ELEM.	24	60	42
PRINCIPALS-PUBLIC SEC.	54	50	9
TEACHERS-PUBLIC ELEM.	22	65	45
TEACHERS-PUBLIC SEC.	35	42	17
PRINCIPALS-PAROCHIAL	19	36	7
TEACHERS-PAROCHIAL	32	67	24
SCHOOL COM. CHAIRMEN	17	38	19
P.T.A. PRESIDENTS	5	6	5
COLLEGE TEACHERS-ED.	17	38	16
COLLEGE TEACHERS-LIB. ARTS	24	29	12
STATE DEPT. OF ED. PERSONNEL	<u>15</u>	<u>19</u>	<u>4</u>
TOTAL	267	575	264

Table 7 F: Individual Initiative by Teachers

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	150	63	10
SUPERVISORS	54	33	2
PRINCIPALS-PUBLIC ELEM.	95	31	8
PRINCIPALS-PUBLIC SEC.	74	29	1
TEACHERS-PUBLIC ELEM.	102	32	7
TEACHERS-PUBLIC SEC.	82	17	5
PRINCIPALS-PAROCHIAL	36	23	3
TEACHERS-PAROCHIAL	70	50	4
SCHOO COM. CHAIRMEN	42	18	3
P.T.A. PRESIDENTS	14	6	3
COLLEGE TEACHERS-ED.	44	23	7
COLLEGE TEACHERS-LIB. ARTS	46	15	6
STATE DEPT. OF ED. PERSONNEL	<u>24</u>	<u>10</u>	<u>2</u>
TOTAL	833	350	61

QUESTION VII: From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with knowledge and professional techniques?

Table 7 G: Local Resource Persons

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	53	103	65
SUPERVISORS	23	38	23
PRINCIPALS-PUBLIC ELEM.	18	73	39
PRINCIPALS-PUBLIC SEC.	15	61	25
TEACHERS-PUBLIC ELEM.	27	61	49
TEACHERS-PUBLIC SEC.	8	39	54
PRINCIPALS-PAROCHIAL	10	39	13
TEACHERS-PAROCHIAL	17	58	44
SCHOOL COM. CHAIRMEN	15	20	25
P.T.A. PRESIDENTS	5	10	8
COLLEGE TEACHERS-ED.	11	43	18
COLLEGE TEACHERS-LIB. ARTS	11	31	20
STATE DEPT. OF ED. PERSONNEL	<u>8</u>	<u>20</u>	<u>8</u>
TOTAL	220	596	390

Table 7 H: State Certification Policies

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	40	65	110
SUPERVISORS	21	32	30
PRINCIPALS-PUBLIC ELEM.	28	54	47
PRINCIPALS-PUBLIC SEC.	22	29	49
TEACHERS-PUBLIC ELEM.	35	51	48
TEACHERS-PUBLIC SEC.	22	27	50
PRINCIPALS-PAROCHIAL	28	21	13
TEACHERS-PAROCHIAL	59	46	18
SCHOOL COM. CHAIRMEN	10	12	40
P.T.A. PRESIDENTS	7	12	3
COLLEGE TEACHERS-ED.	6	12	53
COLLEGE TEACHERS-LIB. ARTS	13	24	29
STATE DEPT. OF ED. PERSONNEL	<u>8</u>	<u>6</u>	<u>22</u>
TOTAL	298	391	511

QUESTION VII: From your experiences, to what degree do the following influence in-service teachers to keep up-to-date with knowledge and professional techniques?

Table 7 I: Other

Classification	Strongly Influence	Moderately Influence	Slightly Influence
SUPERINTENDENTS	13	3	1
SUPERVISORS	4	1	0
PRINCIPALS-PUBLIC ELEM.	8	1	1
PRINCIPALS-PUBLIC SEC.	6	2	0
TEACHERS-PUBLIC ELEM.	11	2	4
TEACHERS-PUBLIC SEC.	8	0	3
PRINCIPALS-PAROCHIAL	1	1	1
TEACHERS-PAROCHIAL	5	4	0
SCHOOL COM. CHAIRMEN	8	1	0
P.T.A. PRESIDENTS	0	1	0
COLLEGE TEACHERS-ED.	7	0	0
COLLEGE TEACHERS-LIB. ARTS	9	2	0
STATE DEPT. OF ED. PERSONNEL	<u>7</u>	<u>0</u>	<u>0</u>
TOTAL	87	18	10

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 A: Provide Flexibility in the Way Personnel are Certified
(in Contrast to Rigid Across-the-Board Paper Requirements
for Everybody

Classification	Yes	No
SUPERINTENDENTS	187	36
SUPERVISORS	60	26
PRINCIPALS-PUBLIC ELEM.	95	34
PRINCIPALS-PUBLIC SEC.	84	20
TEACHERS-PUBLIC ELEM.	107	33
TEACHERS-PUBLIC SEC.	73	29
PRINCIPALS-PAROCHIAL	54	9
TEACHERS-PAROCHIAL	103	21
SCHOOL COM. CHAIRMEN	55	11
P.T.A. PRESIDENTS	20	4
COLLEGE TEACHERS-ED.	64	8
COLLEGE TEACHERS-LIB. ARTS	65	4
STATE DEPT. OF ED. PERSONNEL	<u>25</u>	<u>12</u>
TOTAL	992	247

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 B: Provide for the Certification of an Applicant in a Specified Field or Area, Largely on the Recommendation of the Preparing College in a Program Which is Approved by the State Department of Education

Classification	Yes	No
SUPERINTENDENTS	175	43
SUPERVISORS	66	21
PRINCIPALS-PUBLIC ELEM.	98	28
PRINCIPALS-PUBLIC SEC.	84	20
TEACHERS-PUBLIC ELEM.	112	27
TEACHERS-PUBLIC SEC.	67	34
PRINCIPALS-PAROCHIAL	48	13
TEACHERS-PAROCHIAL	94	31
SCHOOL COM. CHAIRMEN	51	15
P.T.A. PRESIDENTS	18	6
COLLEGE TEACHERS-ED.	65	9
COLLEGE TEACHERS-LIB. ARTS	59	9
STATE DEPT. OF ED. PERSONNEL	<u>32</u>	<u>6</u>
TOTAL	969	262

Table 8 C: Provide as an Alternate Plan, the Possibility of Certification by Examination

Classification	Yes	No
SUPERINTENDENTS	75	137
SUPERVISORS	35	52
PRINCIPALS-PUBLIC ELEM.	45	80
PRINCIPALS-PUBLIC SEC.	42	60
TEACHERS-PUBLIC ELEM.	58	82
TEACHERS-PUBLIC SEC.	48	52
PRINCIPALS-PAROCHIAL	26	36
TEACHERS-PAROCHIAL	58	67
SCHOOL COM. CHAIRMEN	45	18
P.T.A. PRESIDENTS	17	7
COLLEGE TEACHERS-ED.	27	42
COLLEGE TEACHERS-LIB. ARTS	46	22
STATE DEPT. OF ED. PERSONNEL	<u>15</u>	<u>22</u>
TOTAL	537	677

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 D: Require All Public School Teachers Including pre-1951 Teachers to Become Certified

Classification	Yes	No
SUPERINTENDENTS	76	146
SUPERVISORS	34	54
PRINCIPALS-PUBLIC ELEM.	31	99
PRINCIPALS-PUBLIC SEC.	30	71
TEACHERS-PUBLIC ELEM.	63	75
TEACHERS-PUBLIC SEC.	36	65
PRINCIPALS-PAROCHIAL	25	36
TEACHERS-PAROCHIAL	63	59
SCHOOL COM. CHAIRMEN	24	41
P.T.A. PRESIDENTS	12	11
COLLEGE TEACHERS-ED.	32	38
COLLEGE TEACHERS-LIB. ARTS	24	42
STATE DEPT. OF ED. PERSONNEL	<u>17</u>	<u>20</u>
TOTAL	467	757

Table 8 E: Require That All Teachers Become Certified Before Being Hired

Classification	Yes	No
SUPERINTENDENTS	75	146
SUPERVISORS	51	36
PRINCIPALS-PUBLIC ELEM.	72	58
PRINCIPALS-PUBLIC SEC.	43	60
TEACHERS-PUBLIC ELEM.	83	55
TEACHERS-PUBLIC SEC.	57	44
PRINCIPALS-PAROCHIAL	31	31
TEACHERS-PAROCHIAL	63	62
SCHOOL COM. CHAIRMEN	27	38
P.T.A. PRESIDENTS	19	4
COLLEGE TEACHERS-ED.	47	24
COLLEGE TEACHERS-LIB. ARTS	27	38
STATE DEPT. OF ED. PERSONNEL	<u>28</u>	<u>9</u>
TOTAL	623	605

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 F: Make the Completion of a Successful Apprenticeship (Beyond Student Teaching) Prerequisite to Full Certification as a Professional Teacher

Classification	Yes	No
SUPERINTENDENTS	191	31
SUPERVISORS	65	25
PRINCIPALS-PUBLIC ELEM.	91	40
PRINCIPALS-PUBLIC SEC.	88	18
TEACHERS-PUBLIC ELEM.	82	59
TEACHERS-PUBLIC SEC.	67	33
PRINCIPALS-PAROCHIAL	45	16
TEACHERS-PAROCHIAL	81	43
SCHOOL COM. CHAIRMEN	55	10
P.T.A. PRESIDENTS	20	3
COLLEGE TEACHERS-ED.	56	16
COLLEGE TEACHERS-LIB. ARTS	46	20
STATE DEPT. OF ED. PERSONNEL	<u>30</u>	<u>7</u>
TOTAL	917	321

Table 8 G: Provide a Type of Recognition for Master Teachers who Prove Themselves Outstanding on the Job

Classification	Yes	No
SUPERINTENDENTS	199	22
SUPERVISORS	79	8
PRINCIPALS-PUBLIC ELEM.	106	26
PRINCIPALS-PUBLIC SEC.	100	6
TEACHERS-PUBLIC ELEM.	114	27
TEACHERS-PUBLIC SEC.	85	13
PRINCIPALS-PAROCHIAL	56	7
TEACHERS-PAROCHIAL	114	10
SCHOOL COM. CHAIRMEN	58	5
P.T.A. PRESIDENTS	22	0
COLLEGE TEACHERS-ED.	66	6
COLLEGE TEACHERS-LIB. ARTS	67	2
STATE DEPT. OF ED. PERSONNEL	<u>31</u>	<u>7</u>
TOTAL	1097	139

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 H: Require the Periodic Renewal of Teaching Certificates on the Basis of Keeping up with New Knowledge and Professional Techniques.

Classification	Yes	No
SUPERINTENDENTS	171	50
SUPERVISORS	51	36
PRINCIPALS-PUBLIC ELEM.	77	54
PRINCIPALS-PUBLIC SEC.	64	40
TEACHERS-PUBLIC ELEM.	68	72
TEACHERS-PUBLIC SEC.	43	53
PRINCIPALS-PAROCHIAL	49	12
TEACHERS-PAROCHIAL	89	35
SCHOOL COM. CHAIRMEN	49	15
P.T.A. PRESIDENTS	20	3
COLLEGE TEACHERS-ED.	55	15
COLLEGE TEACHERS-LIB. ARTS	57	12
STATE DEPT. OF ED. PERSONNEL	<u>30</u>	<u>8</u>
TOTAL	823	410

Table 8 I: Provide for the Establishment of a Representative Body (Classroom Teachers, Scholars in a Field, Specialists in Education, Administrators, and Laymen) Delegated Authority by the State Department of Education to Approve Teacher Education Programs, Constantly Evaluate Certification Policies and Act upon Individual Cases.

Classification	Yes	No
SUPERINTENDENTS	180	38
SUPERVISORS	71	16
PRINCIPALS-PUBLIC ELEM.	111	22
PRINCIPALS-PUBLIC SEC.	84	20
TEACHERS-PUBLIC ELEM.	116	24
TEACHERS-PUBLIC SEC.	78	22
PRINCIPALS-PAROCHIAL	52	8
TEACHERS-PAROCHIAL	97	26
SCHOOL COM. CHAIRMEN	59	6
P.T.A. PRESIDENTS	20	2
COLLEGE TEACHERS-ED.	62	12
COLLEGE TEACHERS-LIB. ARTS	58	10
STATE DEPT. OF ED. PERSONNEL	<u>33</u>	<u>5</u>
TOTAL	1021	211

QUESTION VIII: Do you feel that the following would lead to an improvement of criteria and/or practices of teacher certification?

Table 8 J: Provide for the Centralization of All Certification, e.g., Adult Civic Education, Adult Basic Education and Vocational Education in One Department or Board

Classification	Yes	No
SUPERINTENDENTS	180	29
SUPERVISORS	57	26
PRINCIPALS-PUBLIC ELEM.	90	34
PRINCIPALS-PUBLIC SEC.	76	26
TEACHERS-PUBLIC ELEM.	84	48
TEACHERS-PUBLIC SEC.	66	26
PRINCIPALS-PAROCHIAL	37	20
TEACHERS-PAROCHIAL	67	52
SCHOOL COM. CHAIRMEN	40	21
P.T.A. PRESIDENTS	15	6
COLLEGE TEACHERS-ED.	51	12
COLLEGE TEACHERS-LIB. ARTS.	37	26
STATE DEPT. OF ED. PERSONNEL	<u>31</u>	<u>6</u>
TOTAL	831	332

Table 8 K: Reduce the Number of Certificates to General Categories Such as Administrative, Teaching, and Special School Service Personnel with Appropriate Endorsements in Areas of Specialization

Classification	Yes	No
SUPERINTENDENTS	143	69
SUPERVISORS	64	22
PRINCIPALS-PUBLIC ELEM.	102	29
PRINCIPALS-PUBLIC SEC.	73	30
TEACHERS-PUBLIC ELEM.	93	41
TEACHERS-PUBLIC SEC.	62	37
PRINCIPALS-PAROCHIAL	49	13
TEACHERS-PAROCHIAL	97	26
SCHOOL COM. CHAIRMEN	41	23
P.T.A. PRESIDENTS	15	4
COLLEGE TEACHERS-ED.	57	8
COLLEGE TEACHERS-LIB. ARTS	47	15
STATE DEPT. OF ED. PERSONNEL	<u>19</u>	<u>16</u>
TOTAL	862	333

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 B: Para-professional Personnel, e.g. Teacher Aides, Lay Readers, Interns in Training

SUPERINTENDENTS	42
SUPERVISORS	22
PRINCIPALS-PUBLIC ELEM.	24
PRINCIPALS-PUBLIC SEC.	18
TEACHERS-PUBLIC ELEM.	16
TEACHERS-PUBLIC SEC.	19
PRINCIPALS-PAROCHIAL	4
TEACHERS-PAROCHIAL	18
SCHOOL COM. CHAIRMEN	9
P.T.A. PRESIDENTS	2
COLLEGE TEACHERS-ED.	17
COLLEGE TEACHERS-LIB. ARTS	5
STATE DEPT. OF ED. PERSONNEL	<u>18</u>
TOTAL	214

Table 9 C: Supervisors and Specialists in Curriculum and Instruction

Classification	Yes
SUPERINTENDENTS	210
SUPERVISORS	82
PRINCIPALS-PUBLIC ELEM.	124
PRINCIPALS-PUBLIC SEC.	92
TEACHERS-PUBLIC ELEM.	135
TEACHERS-PUBLIC SEC.	92
PRINCIPALS-PAROCHIAL	59
TEACHERS-PAROCHIAL	118
SCHOOL COM. CHAIRMEN	58
P.T.A. PRESIDENTS	23
COLLEGE TEACHERS-ED.	66
COLLEGE TEACHERS-LIB. ARTS	56
STATE DEPT. OF ED. PERSONNEL	<u>38</u>
TOTAL	1153

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 D: Principals

Classification	Yes
SUPERINTENDENTS	216
SUPERVISORS	78
PRINCIPALS-PUBLIC ELEM.	119
PRINCIPALS-PUBLIC SEC.	95
TEACHERS-PUBLIC ELEM.	137
TEACHERS-PUBLIC SEC.	88
PRINCIPALS-PAROCHIAL	62
TEACHERS-PAROCHIAL	121
SCHOOL COM. CHAIRMEN	55
P.T.A. PRESIDENTS	21
COLLEGE TEACHERS-ED.	68
COLLEGE TEACHERS-LIB. ARTS	47
STATE DEPT. OF ED. PERSONNEL	<u>36</u>
TOTAL	1143

Table 9 E: Superintendents

Classification	Yes
SUPERINTENDENTS	215
SUPERVISORS	74
PRINCIPALS-PUBLIC ELEM.	111
PRINCIPALS-PUBLIC SEC.	91
TEACHERS-PUBLIC ELEM.	129
TEACHERS-PUBLIC SEC.	85
PRINCIPALS-PAROCHIAL	58
TEACHERS-PAROCHIAL	121
SCHOOL COM. CHAIRMEN	51
P.T.A. PRESIDENTS	20
COLLEGE TEACHERS-ED.	64
COLLEGE TEACHERS-LIB. ARTS	43
STATE DEPT. OF ED. PERSONNEL	<u>34</u>
TOTAL	1096

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 F: Guidance Counselors

Classification	Yes
SUPERINTENDENTS	216
SUPERVISORS	83
PRINCIPALS-PUBLIC ELEM.	125
PRINCIPALS-PUBLIC SEC.	97
TEACHERS-PUBLIC ELEM.	125
TEACHERS-PUBLIC SEC.	95
PRINCIPALS-PAROCHIAL	56
TEACHERS-PAROCHIAL	109
SCHOOL COM. CHAIRMEN	61
P.T.A. PRESIDENTS	23
COLLEGE TEACHERS-ED.	64
COLLEGE TEACHERS-LIB. ARTS	57
STATE DEPT. OF ED. PERSONNEL	<u>38</u>
TOTAL	1149

Table 9 G: Audio-Visual Specialists

Classification	Yes
SUPERINTENDENTS	130
SUPERVISORS	54
PRINCIPALS-PUBLIC ELEM.	83
PRINCIPALS-PUBLIC SEC.	55
TEACHERS-PUBLIC ELEM.	62
TEACHERS-PUBLIC SEC.	51
PRINCIPALS-PAROCHIAL	23
TEACHERS-PAROCHIAL	43
SCHOOL COM. CHAIRMEN	25
P.T.A. PRESIDENTS	15
COLLEGE TEACHERS-ED.	38
COLLEGE TEACHERS-LIB. ARTS	24
STATE DEPT. OF ED. PERSONNEL	<u>25</u>
TOTAL	628

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 H: Supervisors of Student Teaching

Classification	Yes
SUPERINTENDENTS	170
SUPERVISORS	80
PRINCIPALS-PUBLIC ELEM.	117
PRINCIPALS-PUBLIC SEC.	81
TEACHERS-PUBLIC ELEM.	137
TEACHERS-PUBLIC SEC.	94
PRINCIPALS-PAROCHIAL	57
TEACHERS-PAROCHIAL	114
SCHOOL COM. CHAIRMEN	52
P.T.A. PRESIDENTS	18
COLLEGE TEACHERS-ED.	45
COLLEGE TEACHERS-LIBERAL ARTS	51
STATE DEPT. OF ED. PERSONNEL	<u>32</u>
TOTAL	1048

Table 9 I: School Psychologists

Classification	Yes
SUPERINTENDENTS	195
SUPERVISORS	68
PRINCIPALS-PUBLIC ELEM.	110
PRINCIPALS-PUBLIC SEC.	84
TEACHERS-PUBLIC ELEM.	95
TEACHERS-PUBLIC SEC.	72
PRINCIPALS-PAROCHIAL	45
TEACHERS-PAROCHIAL	94
SCHOOL COM. CHAIRMEN	44
P.T.A. PRESIDENTS	20
COLLEGE TEACHERS-ED.	62
COLLEGE TEACHERS-LIBERAL ARTS	41
STATE DEPT. OF ED. PERSONNEL	<u>35</u>
TOTAL	965

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 J: Teachers of the Handicapped

Classification	Yes
SUPERINTENDENTS	208
SUPERVISORS	80
PRINCIPALS-PUBLIC ELEM.	125
PRINCIPALS-PUBLIC SEC.	92
TEACHERS-PUBLIC ELEM.	126
TEACHERS-PUBLIC SEC.	85
PRINCIPALS-PAROCHIAL	51
TEACHERS-PAROCHIAL	106
SCHOOL COM. CHAIRMEN	46
P.T.A. PRESIDENTS	18
COLLEGE TEACHERS-ED.	62
COLLEGE TEACHERS-LIB. ARTS	53
STATE DEPT. OF ED. PERSONNEL	<u>34</u>
TOTAL	1086

Table 9 K: Substitute Teachers

Classification	Yes
SUPERINTENDENTS	39
SUPERVISORS	37
PRINCIPALS-PUBLIC ELEM.	52
PRINCIPALS-PUBLIC SEC.	14
TEACHERS-PUBLIC ELEM.	60
TEACHERS-PUBLIC SEC.	35
PRINCIPALS-PAROCHIAL	25
TEACHERS-PAROCHIAL	58
SCHOOL COM. SHAI RMEN	18
P.T.A. PRESIDENTS	12
COLLEGE TEACHERS-ED.	30
COLLEGE TEACHERS-LIB. ARTS	22
STATE DEPT. OF ED. PERSONNEL	<u>17</u>
TOTAL	419

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 L: Teacher of Adult and Vocational Education

Classification	Yes
SUPERINTENDENTS	146
SUPERVISORS	63
PRINCIPALS-PUBLIC ELEM.	101
PRINCIPALS-PUBLIC SEC.	63
TEACHERS-PUBLIC ELEM.	88
TEACHERS-PUBLIC SEC.	63
PRINCIPALS-PAROCHIAL	50
TEACHERS-PAROCHIAL	93
SCHOOL COM. CHAIRMEN	32
P.T.A. PRESIDENTS	13
COLLEGE TEACHERS-ED.	51
COLLEGE TEACHERS-LIB. ARTS	27
STATE DEPT. OF ED. PERSONNEL	<u>35</u>
TOTAL	825

Table 9 M: Tax Supported Junior College Teachers

Classification	Yes
SUPERINTENDENTS	155
SUPERVISORS	71
PRINCIPALS-PUBLIC ELEM.	109
PRINCIPALS-PUBLIC SEC.	84
TEACHERS-PUBLIC ELEM.	119
TEACHERS-PUBLIC SEC.	80
PRINCIPALS-PAROCHIAL	49
TEACHERS-PAROCHIAL	101
SCHOOL COM. CHAIRMEN	41
P.T.A. PRESIDENTS	17
COLLEGE TEACHERS-ED.	33
COLLEGE TEACHERS-LIB. ARTS	21
STATE DEPT. OF ED. PERSONNEL	<u>29</u>
TOTAL	909

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 N: Kindergarten Teachers (Certified Separately from Elementary Teachers)

Classification	Yes
SUPERINTENDENTS	142
SUPERVISORS	62
PRINCIPALS-PUBLIC ELEM.	98
PRINCIPALS-PUBLIC SEC.	72
TEACHERS-PUBLIC ELEM.	109
TEACHERS-PUBLIC SEC.	67
PRINCIPALS-PAROCHIAL	34
TEACHERS-PAROCHIAL	73
SCHOOL COM. CHAIRMEN	51
P.T.A. PRESIDENTS	17
COLLEGE TEACHERS-ED.	53
COLLEGE TEACHERS-LIB. ARTS	41
STATE DEPT. OF ED. PERSONNEL	<u>29</u>
TOTAL	848

Table 9 O: Junior High Teachers (Certified Separately from Elementary Teachers)

Classification	Yes
SUPERINTENDENTS	104
SUPERVISORS	50
PRINCIPALS-PUBLIC ELEM.	76
PRINCIPALS-PUBLIC SEC.	59
TEACHERS-PUBLIC ELEM.	108
TEACHERS-PUBLIC SEC.	61
PRINCIPALS-PAROCHIAL	33
TEACHERS-PAROCHIAL	70
SCHOOL COM. CHAIRMEN	46
P.T.A. PRESIDENTS	18
COLLEGE TEACHERS-ED.	40
COLLEGE TEACHERS-LIB. ARTS	33
STATE DEPT. OF ED. PERSONNEL	<u>25</u>
TOTAL	723

QUESTION IX: Which kinds of public school personnel should have state certification?

Table 9 P: Other

Classification	Yes
SUPERINTENDENTS	13
SUPERVISORS	7
PRINCIPALS-PUBLIC ELEM.	9
PRINCIPALS-PUBLIC SEC.	0
TEACHERS-PUBLIC ELEM.	6
TEACHERS-PUBLIC SEC.	3
PRINCIPALS-PAROCHIAL	0
TEACHERS-PAROCHIAL	1
SCHOOL COM. CHAIRMEN	1
P.T.A. PRESIDENTS	0
COLLEGE TEACHERS-ED.	3
COLLEGE TEACHERS-LIB. ARTS	2
STATE DEPT. OF ED. PERSONNEL	<u>8</u>
TOTAL	53

QUESTION X: Should parochial and other non-public teachers be included in State certification?

Classification	Yes	No
SUPERINTENDENTS	181	34
SUPERVISORS	62	21
PRINCIPALS-PUBLIC ELEM.	106	22
PRINCIPALS-PUBLIC SEC.	73	27
TEACHERS-PUBLIC ELEM.	104	32
TEACHERS-PUBLIC SEC.	79	22
PRINCIPALS-PAROCHIAL	63	0
TEACHERS-PAROCHIAL	115	10
SCHOOL COM. CHAIRMEN	43	17
P.T.A. PRESIDENTS	16	4
COLLEGE TEACHERS-ED.	53	18
COLLEGE TEACHERS-LIB. ARTS	49	18
STATE DEPT. OF ED. PERSONNEL	<u>30</u>	<u>8</u>
TOTAL	974	233

QUESTION XI: Certain other professions have developed procedures for admission, continuation, or advancement in professional status. These may or may not be linked to legal licensing procedures. Do you feel that the teaching profession in Massachusetts should take greater responsibility to develop standards and procedures for the admission and maintenance of professional status in teaching?

Classification	Yes	No
SUPERINTENDENTS	203	16
SUPERVISORS	77	8
PRINCIPALS-PUBLIC ELEM.	117	15
PRINCIPALS-PUBLIC SEC.	92	11
TEACHERS-PUBLIC ELEM.	117	19
TEACHERS-PUBLIC SEC.	83	9
PRINCIPALS-PAROCHIAL	53	7
TEACHERS-PAROCHIAL	115	9
SCHOOL COM. CHAIRMEN	58	4
P.T.A. PRESIDENTS	20	3
COLLEGE TEACHERS-ED.	72	1
COLLEGE TEACHERS-LIB. ARTS	57	10
STATE DEPT. OF ED. PERSONNEL	<u>33</u>	<u>2</u>
TOTAL	1097	114

QUESTION XII: In terms of intellectual and scholarly capacities, prospective teachers should be drawn from: (Check your preference as the ideal.)

Classification	Total College Pop.	Upper half College Pop.	Upper One- Fourth Col- lege Pop.	Other
SUPERINTENDENTS	103	84	27	5
SUPERVISORS	38	36	10	3
PRINCIPALS-PUBLIC ELEM.	67	46	18	2
PRINCIPALS-PUBLIC SEC.	61	33	8	1
TEACHERS-PUBLIC ELEM.	82	46	9	2
TEACHERS-PUBLIC SEC.	43	30	19	5
PRINCIPALS-PAROCHIAL	29	26	5	1
TEACHERS-PAROCHIAL	68	47	5	2
SCHOOL COM. CHAIRMEN	29	20	8	4
P.T.A. PRESIDENTS	10	8	3	0
COLLEGE TEACHERS-ED.	30	24	10	6
COLLEGE TEACHERS-LIB. ARTS	22	25	21	1
STATE DEPT. OF ED. PERSONNEL	<u>17</u>	<u>11</u>	<u>3</u>	<u>2</u>
TOTAL	599	436	146	34

QUESTION XIII: Should programs of preparation for teaching place greater emphasis on: (Rate in order of importance: 1, 2, 3, etc.)

Table 13 A: Liberal Arts Background

Classification	(1)	(2)	(3)	(4)
SUPERINTENDENTS	83	63	47	24
SUPERVISORS	25	24	25	13
PRINCIPALS-PUBLIC ELEM.	33	41	33	26
PRINCIPALS-PUBLIC SEC.	44	45	13	2
TEACHERS-PUBLIC ELEM.	37	34	30	39
TEACHERS-PUBLIC SEC.	31	32	24	11
PRINCIPALS-PAROCHIAL	17	19	12	14
TEACHERS-PAROCHIAL	39	45	24	17
SCHOOL COM. CHAIRMEN	20	17	12	8
P.T.A. PRESIDENTS	5	5	7	5
COLLEGE TEACHERS-ED.	20	14	23	10
COLLEGE TEACHERS-LIB. ARTS	30	25	10	4
STATE DEPT. OF ED. PERSONNEL	<u>8</u>	<u>12</u>	<u>9</u>	<u>6</u>
TOTAL	392	376	269	179

Table 13 B: Specialization in Teaching Field

Classification	(1)	(2)	(3)	(4)
SUPERINTENDENTS	102	73	38	8
SUPERVISORS	52	24	8	3
PRINCIPALS-PUBLIC ELEM.	53	44	24	11
PRINCIPALS-PUBLIC SEC.	51	39	11	4
TEACHERS-PUBLIC ELEM.	54	46	38	2
TEACHERS-PUBLIC SEC.	52	33	13	2
PRINCIPALS-PAROCHIAL	33	15	11	3
TEACHERS-PAROCHIAL	64	33	21	7
SCHOOL COM. CHAIRMEN	23	19	13	2
P.T.A. PRESIDENTS	12	7	3	0
COLLEGE TEACHERS-ED.	26	22	17	3
COLLEGE TEACHERS-LIB. ARTS	31	19	12	5
STATE DEPT. OF ED. PERSONNEL	<u>16</u>	<u>12</u>	<u>4</u>	<u>3</u>
TOTAL	569	386	213	53

QUESTION XIII: Should programs of preparation for teaching place greater emphasis on: (Rate in order of importance: 1, 2, 3, etc.)

Table 13 C: Study about Education

Classification	(1)	(2)	(3)	(4)
SUPERINTENDENTS	12	21	56	122
SUPERVISORS	7	9	24	46
PRINCIPALS-PUBLIC ELEM.	10	12	42	64
PRINCIPALS-PUBLIC SEC.	2	9	29	62
TEACHERS-PUBLIC ELEM.	9	22	35	74
TEACHERS-PUBLIC SEC.	5	11	18	62
PRINCIPALS-PAROCHIAL	8	15	14	24
TEACHERS-PAROCHIAL	15	19	36	55
SCHOOL COM. CHAIRMEN	2	13	9	34
P.T.A. PRESIDENTS	2	3	6	11
COLLEGE TEACHERS-ED.	3	10	15	40
COLLEGE TEACHERS-LIB. ARTS	7	4	9	46
STATE DEPT. OF ED. PERSONNEL	<u>2</u>	<u>7</u>	<u>5</u>	<u>20</u>
TOTAL	84	155	298	660

Table 13 D: Supervised Practice in Teaching (e.g., in Student Teaching or in the Internship)

Classification	(1)	(2)	(3)	(4)
SUPERINTENDENTS	82	70	56	12
SUPERVISORS	27	25	21	15
PRINCIPALS-PUBLIC ELEM.	63	40	24	6
PRINCIPALS-PUBLIC SEC.	29	18	41	17
TEACHERS-PUBLIC ELEM.	72	36	25	8
TEACHERS-PUBLIC SEC.	28	21	40	9
PRINCIPALS-PAROCHIAL	18	16	19	9
TEACHERS-PAROCHIAL	13	32	42	38
SCHOOL COM. CHAIRMEN	24	16	14	5
P.T.A. PRESIDENTS	6	8	5	3
COLLEGE TEACHERS-ED.	31	24	19	6
COLLEGE TEACHERS-LIB. ARTS	14	19	29	5
STATE DEPT. OF ED. PERSONNEL	<u>12</u>	<u>6</u>	<u>14</u>	<u>3</u>
TOTAL	419	331	339	136

QUESTION XIV: A key problem of institutions that prepare teachers is obtaining suitable situations and conditions for student teaching or the internship. Should the State Department of Education, the preparing institutions and the schools of the state create a mechanism to make such resources available to all preparing institutions -- both public and non-profit?

Table 14 A: By Paying the Teachers Who Supervise Teachers or Interns

Classification	Yes
SUPERINTENDENTS	127
SUPERVISORS	51
PRINCIPALS-PUBLIC ELEM.	85
PRINCIPALS-PUBLIC SEC.	56
TEACHERS-PUBLIC ELEM.	84
TEACHERS-PUBLIC SEC.	57
PRINCIPALS-PAROCHIAL	32
TEACHERS-PAROCHIAL	82
SCHOOL COM. CHAIRMEN	21
P.T.A. PRESIDENTS	11
COLLEGE TEACHERS-ED.	48
COLLEGE TEACHERS-LIB. ARTS	45
STATE DEPT. OF ED. PERSONNEL	<u>22</u>
TOTAL	721

Table 14 B: By Scheduling the Orderly use of School Resources by Various Teacher Preparing Institutions

Classification	Yes
SUPERINTENDENTS	103
SUPERVISORS	43
PRINCIPALS-PUBLIC ELEM.	62
PRINCIPALS-PUBLIC SEC.	51
TEACHERS-PUBLIC ELEM.	69
TEACHERS-PUBLIC SEC.	53
PRINCIPALS-PAROCHIAL	42
TEACHERS-PAROCHIAL	66
SCHOOL COM. CHAIRMEN	45
P.T.A. PRESIDENTS	16
COLLEGE TEACHERS-ED.	32
COLLEGE TEACHERS-LIB. ARTS	35
STATE DEPT. OF ED. PERSONNEL	<u>21</u>
TOTAL	639

QUESTION XIV: A key problem of institutions that prepare teachers is obtaining suitable situations and conditions for student teaching or the internship. Should the State Department of Education, the preparing institutions and the schools of the state create a mechanism to make such resources available to all preparing institutions -- both public and non-profit?

Table 14 C: Other

Classification	Yes
SUPERINTENDENTS	25
SUPERVISORS	7
PRINCIPALS-PUBLIC ELEM.	7
PRINCIPALS-PUBLIC SEC.	7
TEACHERS-PUBLIC ELEM.	6
TEACHERS-PUBLIC SEC.	6
PRINCIPALS-PAROCHIAL	1
TEACHERS-PAROCHIAL	2
SCHOOL COM. CHAIRMEN	6
P.T.A. PRESIDENTS	2
COLLEGE TEACHERS-ED.	10
COLLEGE TEACHERS-LIB. ARTS	7
STATE DEPT. OF ED. PERSONNEL	<u>5</u>
TOTAL	91

REVIEW OF TRANSCRIPTS

SAMPLE TRANSCRIPTS - SECONDARY 100

Total Average Methods Hours - 27
Average Hours (Sp. Ed.) - 32
Average Hours (Academic Major) - 26

Average Student Teaching Hours - 8
In Service Teaching - 18

Total Average Major Hours - 37
Average Hours (Sp. Ed.) - 68
Average Hours (Academic Major) - 33

SAMPLE TRANSCRIPTS - ELEMENTARY 100

Total Average Method Hours - 34
Average Hours (Sp. Ed.) - 35
Average Hours (Elem. Major) - 33

Average Student Teaching Hours - 10
In Service Teaching 12

Total Average Major Hours - 47
Average Hours (Sp. Ed. Major) - 75
Average Hours (Academic Elem. Major) - 37

NEW STAFF DATA FOR THE STATE OF MASSACHUSETTS

1967-68

A. WHERE DID NEW STAFF ORIGINATE:

<u>Origination</u>	<u>Raw Data</u>	<u>Percentage of Total New Staff</u>
Connecticut	296	2.55%
Maine	110	.95%
Massachusetts	8029	69.13%
New Hampshire	221	1.90%
New Jersey	113	.97%
New York	393	3.38%
Pennsylvania	107	.92%
Rhode Island	190	1.64%
Vermont	64	.55%
Other States	766	6.60%
State Left Blank	1325	11.41%
TOTAL	11614	100.00%

B. WHAT WERE NEW STAFF MEMBERS PREVIOUS POSITIONS:

<u>Positions</u>	<u>Raw Data</u>	<u>Percentage of Total New Staff</u>
Student	4434	38.17%
Teacher-Public	3514	30.25%
Teacher-Private	442	3.80%
Teacher-Higher Ed	130	1.11%
Ed Admin-Public	105	.90%
Ed Admin-Private	25	.21%
Ed Admin-Higher Ed	11	.09%
Guidance	78	.67%
Librarian	63	.54%
Other Ed Work	310	2.66%
Retirement	6	.05%
Sabbatical With	44	.37%
Sabbatical Without	34	.29%
Business	487	4.19%
Military	69	.59%
Housewife	703	6.05%
Other	335	2.88%
No Response	824	7.09%
TOTAL	11614	99.91%

C. PERCENTAGE OF TOTAL TEACHING FORCE WHICH ARE NEW STAFF: 20.61%

TEACHING PERSONNEL TRAINED IN MASSACHUSETTS
Bulletin # 3, Mass. Research and Development

Table 1: Students in Teacher Training in Massachusetts

	<u>1966</u>	<u>1967</u>	<u>Percentage Increase Between 1966 & 1967</u>
Elementary	2,880	3,109	8.0
Secondary	4,162	4,505	8.2

Table 2: Men and Women in Teacher Training in Massachusetts

	<u>1966</u>	<u>1967</u>	<u>Percentage Increase Between 1966 & 1967</u>
Elementary	381 Men 2,499 Women	463 Men 2,646 Women	21.5 5.9
Secondary	1,785 Men 2,377 Women	2,008 Men 2,497 Women	12.5 5.0

Table 3: Fields of Preparation for Secondary School Teachers-in-Training

<u>Subject Area</u>	<u>1966</u>	<u>1967</u>	<u>Percentage Change Between 1966 & 1967</u>
English	746	745	- 0.1
Social Studies	547	550	+ 0.5
Physical and Health Education	400	475	+ 18.8
Mathematics	369	378	+ 2.4
History & Geography	309	362	+ 17.2
Natural Sciences	259	287	+ 10.8
Special Education	168	241	+ 43.5
French	179	211	+ 17.9
Guidance	186	194	4.3
Music	125	180	+ 42.9
	<u>3,289</u>	<u>3,623</u>	

Table 4: Post-Graduate Placement Data for 1965-66. College Seniors Who Completed Certification Requirements

<u>1967 Position or Activity</u>	<u>Number of Graduates*</u>	<u>Percentage of Graduates</u>
Teaching in Massachusetts		
Men 657	2,723	54.9%
Women 2,066		
Teaching Outside Massachusetts		
Men 330	1,137	22.9%
Women 807		
Continuing Formal Study		
Men 207	442	8.9%
Women 235		
Otherwise Gainfully Employed		
Men 89	293	5.9%
Women 204		
Homemaking		
Women 136	136	2.7%
Seeking Teaching or Non-Teaching Positions		
Men 33	132	2.7%
Women 99		
Military Service		
Men 93	103	2.0%
Women 10		
	<u>4,966</u>	<u>100.0%</u>

*Not included in the figures in this chart are the graduates for whom no data were available. While the absence of information is regretted, there is no reason to believe that data about these graduates, if included, would skew the sample to any significant degree. It can certainly be surmised that some have entered the teaching profession.

STATE DEPARTMENT'S LEADERSHIP TO
IMPROVE TEACHER EDUCATION

- A. Establishing minimum standards.
B. Creating committees to study key problems.
C. Organizing cooperation between school and preparing institutions.
D. Other (Please Describe)

	A	B	C	D (Other)
Alabama	X	X	X	Teacher-Education Council to discuss problems.
Alaska			Proposed	
Arizona	X	X	X	
Arkansas				Facilitating communications among institutions. State Advisory Council
California	X	X	X	
Colorado	Proposed	X	X	
Connecticut	X	X	X	
Delaware	X	X		Coordinating Adv. Council for Teacher Ed.
Dist. of Columbia				
Florida	X	X	X	
Georgia	X	X	X	
Hawaii	X	X	X	Contact of Dir. of Teacher Cert. & Col. Personnel
Idaho	X	X	X	
Illinois	X	X		
Indiana	X	X	X	
Iowa	X	X		
Kansas				
Kentucky	X	X	X	
Louisiana	X	X	X	
Maine	X	X		
Maryland	X	X	X	
Massachusetts				Dev. In-Service Educational Teachers.
Michigan	X	X	X	
Minnesota	X	X	X	
Mississippi	X	X		
Missouri	X	X	X	
Montana	X	X		
Nebraska	X	X	X	
Nevada				
New Hampshire	X	X		
New Jersey	X	X	X	
New Mexico	X	X	X	

STATE DEPARTMENT'S LEADERSHIP TO IMPROVE TEACHER EDUCATION (Continued)

	A	B	C	D (Other)
New York	X	X	X	In-Service Progs., Dev. of New Programs.
North Carolina	X	X	X	
North Dakota				No legal jurisd. but lend pos. assist. to colls. New standards being studied. Re-evaluate teacher-ed. progs. every 5 yrs. & new ones on request.
Ohio	X	X	X	
Oklahoma	X	X		
Oregon	X	X	X	
Pennsylvania	X	X	X	
Rhode Island	X	X	X	Guidelines dist. to higher insti. & coop. teach. Teacher Education Advisory Committee. Research being done.
South Carolina	X	X		
South Dakota	X	X	X	
Tennessee	X	X		
Texas	X	X	X	
Utah		X	X	
Vermont		X	X	
Virginia	X	X		
Washington		X		
West Virginia	X	X	X	
Wisconsin	X	X		
Wyoming	X	X		
Total	40	44	30	12

STATE DEPARTMENT'S HELP IN PROVIDING LABORATORY
RESOURCES FOR STUDENT TEACHERS AND INTERNSHIPS

- A. Reimbursing school systems for the reduction of load of teachers who supervise practice teachers or interns.
- B. Coordinating the placement of student teachers and interns from various colleges and universities in school systems.
- C. Assisting preparing institutions and schools to supervise and evaluate the quality of the clinical experiences provided.
- D. Assisting with the judgment of qualification to teach for individual student teachers or interns.
- E. Other (Please Describe)

	A	B	C	D	E (Other)
Alabama				X	Being studied.
Alaska					Depends on the institution.
Arizona					
Arkansas					
California			X		
Colorado					
Connecticut					
Delaware					
Dist. of Columbia					
Florida			X	X	
Georgia			X		Reimbursing supervising teachers.
Hawaii		X			Reimbursing supervising teachers.
Idaho		X	X		
Illinois					Circulation of student teacher standards & close working relationship.
Indiana		Pro-posed		X	
Iowa			X		
Kansas					
Kentucky					Reviewing qualification of superv. teachers.
Louisiana		X	X		
Maine					Reimbursing supervising teachers.
Maryland			X		
Massachusetts					
Michigan					
Minnesota			X		
Mississippi			Pro-posed		

STATE DEPARTMENT'S HELP IN PROVIDING LABORATORY
RESOURCES FOR STUDENT TEACHERS AND INTERNSHIPS (Continued)

	A	B	C	D	E (Other)
Missouri					None
Montana					
Nebraska			X		
Nevada					Student teaching is the sole responsibility of Nevada's only university.
New Hampshire					
New Jersey					Inter-Council on student teaching & joint committee on teacher education.
New Mexico		X	X		
New York			X	X	Being studied.
North Carolina			X		
North Dakota					College certification that their student teaching req. have been completed successfully.
Ohio			X		
Oklahoma					
Oregon			X		
Pennsylvania					
Rhode Island	X				
South Carolina			X		
South Dakota					None
Tennessee					No state plan.
Texas			X	X	
Utah	X	X	X	X	
Vermont		Pro-	X	X	
		posed			
Virginia			X	X	
Washington			X		
West Virginia			X		
Wisconsin					
Wyoming					No state plan.
Total	3	6	22	9	14

NATIONWIDE RECIPROCITY ARRANGEMENTS

- A. None - qualifications of out-of-state applicants evaluated individually.
- B. Special agreements with certain states based on mutual respect for each other's standards.
- C. Automatic recognition of candidates who are "NCATE" approved institutions.
- D. Agreements in regional associations of states.
- E. Other (Please Describe)

	A	B	C	D	E (Other)
Alabama			X		
Alaska	X				
Arizona	X				
Arkansas	X				
California		X	X		
Connecticut		X	X	X	
Delaware		X	X	X	Approved "Proposed Stands. Bulletin 351".
Dist. of Col.					
Florida			X		
Georgia	X		X		
Hawaii					X
Idaho	X				
Illinois	X		X		
Indiana			X		
Iowa			X		If Iowa's standards are met.
Kansas	X				
Kentucky			X		Recognition of state approved programs.
Louisiana					X
Maine			X	X	If Maine's standards are met and student's college recommends.
Maryland		X	X		
Massachusetts					
Michigan					
Minnesota				X	X
Mississippi	X		X		
Missouri		X			
Montana	X				
Nebraska			X	X	
Nevada	X				
New Hampshire	X	X	X	X	

NATIONWIDE RECIPROCITY ARRANGEMENTS (Continued)

	A	B	C	D	E (Other)
New Jersey		X		X	X
New Mexico		X		X	
New York	X	X		X	Anyone certified in another state with three years experience.
North Carolina	X		X		
North Dakota	X		X		
Ohio	X				
Oklahoma	X	X			
Oregon	X		X		
Pennsylvania		X	X	X	
Rhode Island		X	X	X	
So. Carolina	X				
So. Dakota		X	X	X	
Tennessee			X		
Texas			X		If history requirements are met but not automatic.
Utah			X		
Vermont	X	X		X	Reciprocity with states using "Prop. Standards Bulletin 351".
Virginia			X		"Proposed Standards Bulletin 351" effective July 1, 1968.
Washington			X		X
West Virginia	X				If West Virginia's standards are met.
Wisconsin	X		X		If Wisconsin's standards are met.
Wyoming	X				
Total	23	14	28	13	10

NATIONWIDE APPROACHES TO CERTIFICATION

- A. The tabulation of college credits in terms of specified requirements.
- B. The approval of institution programs, prior to student enrollment with graduates of "approved programs" eligible for certification.
- C. The use of examinations to measure knowledge and ability to teach.
- D. Other (Please Describe)

	A	B	C	D (Other)
Alabama	X	X		
Alaska	X	Proposed		
Arizona	X	X		
Arkansas	X			
California	X	X	X	
Colorado		X		
Connecticut	X	X	X	
Delaware	X	X	X	X
Dist. of Columbia				
Florida	X	X		
Georgia	X	X		
Hawaii	X	X	X	
Idaho	X			
Illinois	X	X		
Indiana		X		
Iowa		X		
Kansas	X	X		
Kentucky		X		
Louisiana		X		
Maine	X	X	X	
Maryland	X	X		
Massachusetts				
Michigan	X	X	X	
Minnesota		X		
Mississippi	X	Proposed		
Missouri	X			
Montana				NCATE Approved Programs Compl. App. Prog. of Accredited Coll. of Univ.
Nebraska		X		
Nevada	X			
New Hampshire	X			
New Jersey	X	X		
New Mexico	X	X		
New York	X	X	X	

NATIONWIDE APPROACHES TO CERTIFICATION (Continued)

	A	B	C	D (Other)
North Carolina		X	X	
North Dakota	X			NCATE Approved out-of-state Ed. grad. from State Coll.
Ohio	X	X		
Oklahoma	X	X		Approved Teacher Ed.
Oregon		X		
Pennsylvania	X	X	X	
Rhode Island		X		
South Carolina	X	X	X	
South Dakota		X		
Tennessee	X	X		
Texas		X		Evaluation of out-of-state transcripts.
Utah	X	X		
Vermont	X	X		
Virginia	X	X		
Washington		X		
West Virginia	X	X	X	
Wisconsin	X	X	X	
Wyoming	X			
Total	35	39	12	5

PAPERS AND CORRESPONDENCE FROM INTERESTED GROUPS

SPECIAL CLASS TEACHERS:
AN OVERVIEW ON EDUCATION, CERTIFICATION, AND ACCREDITATION

advocated by
Massachusetts Association for Retarded Children
680 Main Street, Waltham, Massachusetts 02154
February 1, 1968

Background and Procedures

Professional standards grow out of the unified goals and activities of individuals competent within their field(s). Members of a professional organization or of a combination of professional organizations identify competencies and develop standards for themselves. The legal or extra legal application of the standards through certification and/or accreditation may or may not be a function of the professional organization.

State education agencies affect professional standards in three ways. 1.) The appropriate unit of instruction and curriculum is concerned with the competencies of professional practitioners and with contributing to the development of these competencies. 2.) State education agencies exercise the legal function of certification of educators working in public schools, and 3.) Recognition of flexibility in patterns and modes of preparation as indicated by increasing acceptance of candidates recommended by accredited institutions as having fulfilled basic certification requirements.

Certification and Accreditation

Any discussion of professional standards should include a consideration of both certification and accreditation. Certification is granted to individuals regarded as qualified to serve in a specific professional role. Certification of special educators may come from two sources: 1.) a state may establish the minimum standards which an individual must meet to be

certified to perform a professional role in the public schools within its borders, or 2.) a professional organization, by admitting to membership or various categories of membership those who meet standards of competency, "certifies" that an individual is qualified to pursue a professional role.

"Accreditation, as the term is commonly employed in education, is conferred or granted by professional organizations, associations, or institutions, or by an agency of the state, and applies only to institutions or programs within institutions."

Certification:

Role of professional organizations. Some professional organizations admit to membership only those who meet certain academic and/or experience requirements. Membership standards developed by a professional organization may then become a point of reference for state certification. Since professional organizations tend to set standards above the minimum state education agency requirements, these organizations can provide the impetus to raise standards in the various areas of exceptionality.

Role of the State: The legal responsibility for certification of teachers for positions in the public schools within any state rests with the state education agency. In some states this certification may be recommended by a college or university, but the state retains legal responsibility for granting certification.

Relationships among agencies: Certification standards should be developed through the joint efforts of the state and local education agencies as the consumers and the colleges and universities as the producers of professional personnel. The state education agency should actively seek the advice of appropriate professional organizations in the development of certification standards. It should be recognized that the development of certification standards is the mutual concern of the schools, the preparation insti-

tutions, and the professional groups concerned with mentally retarded children. The dynamic nature of special education necessitates continuous study to ascertain the current reference of certification requirements and to assure that they remain consonant with increments in knowledge and changing philosophies.

Accreditation

Role of professional organizations: Accreditation standards for preparation programs properly originate with a professional body of individuals who are knowledgeable in a particular area of special education. This group should establish guidelines to be adapted by accrediting agencies.

Of special significance is the need for communication among professional organizations, colleges and universities, and state education agencies with regard to formulation and acceptance of standards for accreditation.

Role of the Accrediting Agency: Because of the nature of special education, state activities in the field of accreditation definitely need to be supplemented and underguided by appropriate accrediting agencies for college and university teacher preparation programs. Regional accrediting bodies which concern themselves with an institution's total program and a national accrediting body which is specifically concerned with teacher education programs both have essential roles to play.

Teacher Education Programs

The institutions of higher learning to which the following standards apply are those which offer preparation for teachers of exceptional children. Exceptional children are defined as those children who have physical, intellectual, communicative, social, or emotional deviations to such a degree that curriculum modification and/or special services must be provided for them in schools.

Organization and Administration: Programs in special education should be a part of the administrative unit generally responsible for professional preparation of teachers within the institution. The general programs of teacher education should be fully accredited. The special education program should be an identifiable and coordinated unit within the institution.

The total range of resources of the institution should be available as appropriate, to strengthen the special education program. Teaching programs as well as laboratory, clinical, and demonstration facilities in medicine, psychology, social work, counseling and guidance, and other related fields should be used to strengthen the special education program. If programs in these fields are not available on campus, community resources should be used.

The director of the special education department should be a specialist in the education of exceptional children. He should be given authority, responsibility, and fiscal support necessary to implement the program. All specific programs of teacher education should be carefully organized and be approved through the institutions normal channels of curriculum and program approval. All of the programs should meet approval or accreditation standards of the state in which the institution is located.

Student Personnel Programs and Services: Recruitment and selection of teacher candidates in special education should receive continuing attention. In addition to meeting the institution's usual standards for admission, candidates should be carefully screened by the special education faculty. An effective orientation program should acquaint students with the several areas of special education and the opportunities and responsibilities involved in the profession of teaching and in special education in particular. A continuing program of screening and evaluation should assure that only

qualified candidates are continued in preparation programs and that students develop professional goals and attitudes.

Faculty: Full-time faculty members should have full status as college staff members and meet all standards for preparation and experience generally held by the institution.

A minimum in each special area for which accreditation is sought is one faculty member whose major duty is professional education in the special area.

Faculty members offering professional courses which relate directly to the instructional program for children and youth in an area of exceptionality should have had appropriate preparation and related experience in that area. Institutions offering graduate training should have all necessary facilities for research and employ faculty fully competent to conduct and supervise research.

Curricula: There is apparent professional consensus that the preparation of special education personnel should include a common core of knowledge related to human learning, child development, differential psychology, language development, skills in psychoeducational procedures and remediation, and motor development in children.

Students in all special fields should have at least introductory knowledge concerning characteristics, prevalence, educational procedures, research, and relevant resources for all major categories of exceptional children. In each area of exceptionality for which accreditation is sought, there should be provisions for at least the following content or experience:

- a) nature, needs, and problems of children with the exceptionality
- b) methods and materials in the education of the particular group of children
- c) history, philosophy, and research relevant to the particular field and to exceptional children generally

d) a broad program of laboratory and field experiences

Complete sequences for preparation of teachers should be offered regularly in a setting which provides an adequate library as well as adequate opportunities for practica and other necessary educational experiences. Summer preparation should be offered only in institutions with year round programs in the particular area(s) of specialization.

Full-time residence study during undergraduate preparation is essential. A period of full-time residence study is also necessary at the post baccalaureate level for degree candidates or for persons who are seeking certification in special education at this level. The "shopping around" of non-degree-seeking persons desiring special education certification should be discouraged. An institution cannot assume responsibility for the professional competence of such persons and should guard against undue mobility by requiring that the major portion of preparation be taken in residence before students are recommended to state agencies as having successfully completed a sequence of courses leading to certification. This demands a close working relationship between state education agencies and teacher preparation institutions.

Summer preparation has an important place in continuing education and for the student in residence during the regular academic year. The full-time residence study of the person obtaining preservice specialized professional preparation should not, however, consist solely of summer preparation.

Practica: Contact with children should begin early in the student's career and continue to increase in variety and intensity until the completion of formal preparation. Guided observation should constitute the initial contacts. Observations should be followed by demonstration and participation as an integral part of theoretical courses. Next

should come student teaching, characterized by thorough supervision from the sponsoring institution. This may be followed by a period of internship with less supervision and more independence and responsibility and often with the intern paid a portion of a professional salary.

Practica experiences should be preceded by or be concurrent with parallel course work. The student's reactions to these experiences should not be overlooked as a continual screening and evaluation device. Practica experiences should include contact with both normal and exceptional children, children of varying ages, and children in various educational settings.

Student Teaching: The program in student teaching should reflect careful and cooperative planning among various groups to assure the provision of superior opportunities for preparation. Programs may be established in campus, community, or residential settings. The location of the setting is less important than the opportunity to work in adequate facilities with a master teacher who is qualified for this important role.

The cooperating master teacher should have the ability and desire to work with student teachers and should evince the professional background and teaching competence necessary for his role. He should have completed an advanced academic program in his area of specialty, should possess any credentials appropriate to his specialty, and should have taught for at least three years in the special area in which he is preparing the student.

Close and continuing guidance should be given the student during his student teaching experience. This requires that the college supervisor be allocated sufficient time to make at least two supervisory visits each month and that he have time and opportunity for conferences both on the campus and in the school setting. The student teaching assignment

requires that the supervisor participate in various ways in the identification of desirable teaching situations, in general professional growth programs for the students, and in evaluation and improvement of the total program, as well as in group conferences with the student and the cooperating master teacher.

The college supervisor should have the skills and knowledge expected of the cooperating master teacher. In addition, his responsibilities require knowledges in all areas of general and special education and breadth of professional experience. A superior level of academic and practical competence is required of the college supervisor in his role as general guide and coordinator for the student teaching experience.

Facilities: Facilities for preparing teachers of exceptional children should include:

- 1) A library, meeting general accreditation standards, which includes: a) a broad collection in the field of education and all standard reference material, b) an extensive collection in special education, and c) all standard works in the particular area(s) of specialization.
- 2) Adequate curricula materials in education, special education, and the particular area(s) of specialization.
- 3) Clinical facilities in such fields as medicine (including appropriate special branches), rehabilitation, speech correction, psychology, audiology, and remedial instruction. If not available on the campus, such clinical facilities should exist in accessible communities and be utilized by the special education department in offering practical experiences.
- 4) Community resources, including day school and residential school facilities for children at the preschool, elementary, and secondary levels; rehabilitation centers; social case work agencies; and diagnostic and treatment agencies.

Certification of Special Education Teachers for the Mentally Retarded

Areas of Professional Competence: These guidelines for professional standards are concerned with basic areas of knowledge and experiences

considered essential for the professional preparation of teachers of the mentally retarded. They are organized according to the following areas:

a) historical, philosophical, and sociocultural foundations; b) behaviorial development; growth, maturation, and learning; c) measurement and evaluation; d) instruction; curriculum methodology; and e) practicum; observation, demonstration, participation, and student teaching.

The guidelines should apply to preparation programs for all teachers of the mentally retarded. However, teacher education programs should reflect a recognition of both the similar and differing special educational needs of educable and trainable mentally retarded children. The areas of historical, philosophical, and sociocultural foundations; behaviorial development, and measurement and evaluation would be similar for teachers of both groups. The areas of instruction and practicum should differ in content and emphasis. Similar differentiations may be made for the different age levels within these two groups. The teacher of the trainable mentally retarded should have methods, curriculum, and practicum experiences specifically with trainable retardates, while the teacher of the educable mentally retarded should have methods, curriculum, and practicum experiences specifically with educable retardates.

Historical, Philosophical, and Sociocultural Foundations: The prospective teacher of the mentally retarded needs to develop understanding of: a) the historical and contemporary philosophical and social determinants of public education b) the historical and contemporary philosophical and social determinants of public education as they accomodate provisions for all exceptional children; and c) the multiple aspects of mental retardation as a philosophical, social, psychological, and educational problem.

Preparation programs for teachers of mentally retarded children should emphasize the sociological implications for learning. Reassessment

of present special class programs and reconstruction of these programs should be considered in view of new knowledge concerning the nature of culturally disadvantaged children and newer insights concerning how children learn.

Behaviorial Development: Growth, Maturation, and Learning: The prospective teacher of the mentally retarded must acquire a comprehensive and comparative knowledge and understanding of: a) the principles of child growth and development, including the biological and sociocultural determinants of growth, maturation, and learning; b) the implications of various kinds of exceptional development and behavior for growth, maturation, and learning and for reciprocal relationships between the exceptional person and other members of society; and c) the multiple implications of the various levels of mental retardation with respect to impairment in growth, maturation, and learning and with respect to their psycho-social impact(s) upon the mentally retarded individual, his family, and other members of society.

Teachers of mentally retarded children need a systematic approach to teaching which has a strong conceptual base and is consistent with the learning characteristics of these children. The teacher should become the eliciting stimulus in the learning process so that the children become participants rather than recipients.

Teachers of the mentally retarded should be able to work effectively with the parents of these children. This requires that the teacher have skills in interview techniques and interpretation of pupil progress and behavior.

Measurement and Evaluation: The prospective teacher of the mentally retarded needs to develop functional competence in: a) the use of various formal and informal methods of appraising and communicating pupils' educational status and progress, both in traditional academic areas and in other areas of school responsibility such as screening for identification of

children with special problems or disabilities in cognitive, motor, sensory language, social, or emotional growth; b) the utilization of various types of clinical data which are relevant to special educational requirements; c) the utilization of a wide array of data for appraisal and educational planning for the mentally retarded; d) the evaluation of methods and materials to determine their effectiveness in meeting the instructional goals; and e) the utilization of and participation in research.

Instruction: Curriculum - Methodology: The prospective teacher of the mentally retarded must acquire: a) the information and familiarity with instructional materials necessary for adaptation and modification of curriculum and instruction to the special needs of exceptional children at the elementary and/or secondary levels and b) the information and skills necessary for the development, organization, instruction, and evaluation a comprehensive curriculum content for mentally retarded children at designated levels of ability.

The knowledge of and skill in evaluating and adapting the present and past curricula for the mentally retarded, including basic goals, objectives, and content, is essential. It should be emphasized that curriculum development and adaptation should be a continuous process, learning characteristics of children, and new knowledge. The teacher should have skill in organizing the curriculum for instruction, including the development of meaningful and appropriate units of experience. The teacher must be able to sequence the social and occupational emphasis of the curriculum according to the abilities and chronological ages of the pupils. Such sequencing requires knowledge and utilization of Community resources, including vocational rehabilitation and other agencies.

The teacher preparation program should provide for the development of skill in systematic use of the various techniques and approaches now available

for teaching mentally retarded children, including the translation of learning theory to educational methodology. Attention should be given to areas of special classroom organization and management such as effective grouping for instruction, pupil control techniques, daily and long range lesson planning, and scheduling of activities. All school and community resources should be employed to provide integrating, socialization, and learning experiences. The teacher should be skilled in the development and/or utilization of appropriate learning material, instructional media, and resources.

Practicum: Observation, Demonstration, Participation, and Student Teaching: The prospective teacher of the mentally retarded needs ample opportunity for sequentially developed and guided observation, demonstration, participation, and classroom teaching with appropriate groups of mentally retarded children and, when deemed desirable, appropriate groups of other handicapped and normal ability children.

Observation, demonstration, and participation experiences: It is essential that the student have ample opportunities for extensive observation, demonstration, and participation experiences with retardates of various ability and age levels and in a variety of settings. Such formal experiences shall be correlated with coursework requirements. It is important that these experiences be sequentially developed and be provided as early as possible in the student's teacher preparation program.

Student Teaching Experiences: The student teaching experience is intended to provide a transition from the theoretical and abstract aspects of the teacher preparation program to the reality of the classroom.

A combination of the following factors comprise the context within which the experiences of the student teacher will crystallize: a) the bases of cooperation between the school system and the college or univer-

sity, b) the competence of the cooperating master teacher, c) the total program in the cooperating school system, d) continuous professional guidance, e) adequate college supervision, f) comprehensive student teaching experiences, and g) continuing evaluation and modification of all aspects of the student teaching program. All these need careful examination individually and in combination to assure the best approximation of an optimal learning setting for the student teacher.

Cooperating systems: There is increasing agreement among thoughtful educators and laymen that the community should bear a more direct responsibility in the professional preparation of its future teachers. Implementation of the program in teacher education depends to a significant degree upon active cooperation between the preparing institution and the ultimate employers of its graduates. Nowhere is this more evident than in the provision of facilities and personnel for the student teaching assignment.

The realization of appropriate student teaching experiences is best achieved through substantial, realistic, and responsible participation in classroom situations which are comparable to those in which the students will eventually be expected to serve. Attainment of this goal requires that both the college and the community understand and carry out their respective functions, but the responsibility for initiating and continuing the search for appropriate community settings rests essentially with the college. In developing the foundations for such cooperation between college and community, there must be taken into account the necessity for the most careful exploration and planning, with adequate representation of all parties concerned college, school system, and community-at-large.

Among the issues on which working agreements must be developed are instructional philosophy and theory, principles of supervision, details of assignments, remuneration of master cooperating teachers, delineation of responsibility, and details of evaluation and reporting procedures.

The selection of well qualified cooperating teachers is one of the most critical components of the teacher education program. The cooperating teacher's knowledge and experience in mental retardation, pedagogy and classroom management, and the formal and informal standards of the public school are instrumental in helping the student teacher translate prior learning and experience into constructive educational leadership. They will influence the direction, rate, and extent to which the student teacher will develop and implement an educational program for the retarded in the years following the student teaching experience. It is, therefore, imperative that careful consideration be given to process of selection. The following criteria are offered as guidelines in this task.

1. The cooperating teacher should have demonstrated professional competency, as indicated by the approbation of responsible supervisory and administrative personnel based on:

- a) Evidence of a relevant educational program for mentally retarded children in his classroom.
- b) Evidence of social and academic growth in the classroom.
- c) Evidence of an environment conducive to Mental Health.
- d) Evidence that the teacher enjoys substantial professional repute among his colleagues.
- e) Evidence of the teacher's ability to work with parents and auxiliary services.
- f) Evidence of the teacher's active involvement with relevant professional organization.
- g) Evidence of the cooperating teacher's ability to work with and supervise student teachers.
- h) Evidence of consonance between the college's philosophy and that of the teacher.

2. The cooperating teacher should have demonstrated professional competency through the achievement of:

- a) Completion of appropriate academic program of preparation for teaching the mentally retarded.
- b) Fulfillment of state certification requirements for teaching the mentally retarded.
- c) Completion of a minimum of three years of teaching the mentally retarded, one at the level for which he is being considered.
- d) Masters degree or equivalent in advanced preparation in the education of the mentally retarded.

Determination of the student teaching assignments must take into consideration not only the adequacy of the cooperating staff, but also the total program for the mentally retarded in the existing programs, including accommodations, facilities and equipment, the specific nature of the class enrollment, the extent to which the class functions as an integral part of the total school program. As much as possible, the student teaching site should be representative of special classes so that the student teacher will be able to effect a comfortable and effective transition into his own class.

Continuing professional guidance: Provision must be made for helping the student teacher derive maximum professional benefit from his observations and teaching experiences. Such continuing professional guidance is facilitated by close communication between the student, the cooperating teacher, and the college supervisor.

Adequate college supervision: The responsibility of the college for the coordination and supervision of student teaching activities is of primary importance, and adequate time of college personnel should be allocated for this purpose.

The complex nature and comprehensive scope of the supervisor's task is indicated by the following illustrative assignments:

1. Instruction in curriculum and methods for the mentally retarded.
2. Participation in the continuing search for and evaluation of student teaching sites and cooperating personnel.

3. Continuing participation in development and implementation of policies regarding student teaching.
4. Continuing role in directing professional growth of the student through conferences and seminars.
5. Responsibility for relating student teaching functions to the total program of professional preparation.
6. Regular visitation program during the period of student teaching assignment for purpose of identifying special needs of the student teacher.
7. Planned visits and preparation of progress and final evaluation reports for the student teacher.

It is essential that the college supervisor have the skills and knowledge represented by the cooperating master teacher. The following criteria are suggested as guidelines in the selection of the supervisor:

1. Experience as a teacher of the mentally retarded.
2. Background of advanced preparation in special education, including programs for exceptional children.
3. Understanding of current problems and practices in educational programs for exceptional children.
4. Evidence of ability to synthesize the various components of the student teaching program.

Comprehensive student teaching experiences: A comprehensive student teaching experience provides for sequential activities from the student's introduction to the group to his full responsibility for management of the class.

These activities would allow sufficient time for observation and study of children, for work with individuals and small groups, and for

contacts with children in situations other than the home room, such as playground, cafeteria, gymnasium, home, and neighborhood.

The comprehensive student teaching experience introduces the students to the professional role of a faculty member and to the resources available for professional improvement and pupil services.

Continuing evaluation and modification: Continuing success of the student teaching program is dependent upon the extent to which there is on-going and systematic evaluation and modification of all aspects. This includes complete review of duration and sequence of assignment, adequacy of personnel and facilities, effectiveness of supervisory conferences and seminars, content of the student teaching experiences, and the evaluation of the student teacher's performance. This should be accomplished with the cooperation of the critic teacher, the school supervision, principal, student, and college supervisor.

CERTIFICATION FOR AV SPECIALISTS

One of the most important problems facing Audiovisual Media People today is certification. Eventually certification for the instruction-oriented Audiovisual Specialist will be a necessary reality. Today, it is a pressing problem, under serious consideration by a number of professional groups.

WHY IS AUDIOVISUAL CERTIFICATION IMPORTANT TO EDUCATION?

Administrators, whether doctors, judges, superintendents, or contractors want to know how well-qualified their specialists are, to do the jobs that need to be done. Certification is a tool - whether used in medicine, law, education or engineering. As a tool, it is used to ensure quality in the product of the profession. Through certification - or the specification of required training and experience - professional personnel will reach a desired proficiency in task performance. Through the use of certification standards, the administrator can be assured that his employees have been trained for the tasks to be performed.

Yesterday, audiovisual specialists barely existed. Audiovisual materials existed. Audiovisual equipment existed. A few perspecacious individuals existed who were dedicated to the idea that these "audiovisual aids" could improve the quality of instruction.

Over a period of time -- and one is not sure whether to start with Socrates, Pestalozzi, or Edison, some men developed knowledge and skill regarding the instructional effectiveness of audiovisual equipment and correlative materials. These men, and women, eventually brought educational technology into focus for the rest of Education. Their story is long, was valiantly won, and heroically persevering. Their contribution to Education

has finally proved to be of magnificent value.

However, it has also created a problem. Now "everyone" wants to have and successfully use audiovisual materials and equipment - and only the few people who have been actively working in this field possess the necessary "know how" to properly use and successfully manage this new technology. The influence of NDEA, ESEA, and other federal programs has resulted in a wealth of audiovisual equipment and materials in the schools, and a dearth of trained people to properly use and manage them.

Certification of trained audiovisual personnel will be a step toward matching the manpower need to the material supply.

Yesterday, with little equipment and few materials, anyone could be appointed to manage it. It was a small job and required little real effort. Not many people really cared whether the material was used or not.

Today there is much material, many different pieces of equipment; it is in operation throughout the instructional program - and quite a few people care that it is used - and used correctly.

Therefore, school administrators now require trained, competent audiovisual specialists to administer this rapidly expanding field and direct the proper use of this educational technology.

Consequently, there is now a need for certification standards which will promote the adequate training of audiovisual specialists and give evidence that this training has been successfully attained. Audiovisual certification is as essential to audiovisual practice as teacher certification is to teaching.

Certification of professional audiovisual personnel has been developed in a number of states. Audiovisual Instruction has carried reports on these

certification requirements as they became evident for several years. A compilation of these certification requirements was given, by states, as far back as the September, 1962 issue of Audiovisual Instruction.

An examination of the certification requirements of eight of the states having audiovisual certification reveals a variety of criteria utilized to provide for certification. Some criteria is common to all, or most, states studied. For example, most states assume that audiovisual supervision is an administrative function, and therefore, the requirements for an administrative certificate is a pre-requisite for an audiovisual certificate. Most states require a Masters Degree in the field of specialty for the higher administrative posts. All states require 2-3 years teaching experience. All states provide a "grandfather" clause which recognizes previous experience in the audiovisual field - allowing for a "provisional" certificate to become "permanent" upon the completion of selected, additional course work.

An accurate comparison of the criteria used by each state for audiovisual certification is impossible at this time due to the variances of the criteria used. For instance, some states prefer to use semester hours as criteria for measuring training while others prefer to state their training requirements in percentages. Some states are explicit concerning course work to be completed - others are rather general. Some states separate the library function from the audiovisual functions - others mix the two. Some states provide certification standards for part time personnel - others do not. Some states recognize a difference in training needs at the elementary level as compared to the high school and college levels - others do not make this distinction. The problem of making an accurate comparison of audiovisual certification requirements is further compounded as the titles assigned to the audiovisual administrator differ and as the descriptions of this titled administrator vary.

The attainment of audiovisual certification - in any state will require the overcoming of a variety of problems. To discover the problems, a plan must be presented. Reactions to the plan will reveal the problems. The co-operative solution to these problems should yield the long-overdue and desperately needed certification of audiovisual specialists.

A review of the literature on the subject of audiovisual certification reveals more questions asked than answered. It is time for a national plan to be presented. Let the plan provoke all of the questions. Let the questions be answered within the framework of the proposed plan. Let the framework modify its form and content on the basis of the answers it gains. Let action replace asking for action.

The following plan has been proposed by the AAAYEd Certification Committee chairman. This plan features certification criteria for the Audiovisual Media Specialist of a district, region, high school and/or junior college.

Nothing about this plan has, as yet, been approved. Under question are the divisions, the audiovisualists' title, and the criteria and experience requirements listed.

Your recommendations for the acceptance or modification of this proposed plan are sincerely requested. With your reactions, the Certification Committee of the PEMS Commission may be able to draft a comprehensive plan for audiovisual certification criteria which may prove valuable to all states seeking audiovisual certification. Please address your recommendations to:

Clark P. Shelby
Certification Committee Chairman
Alhambra School District
3001 West Hazelwood
Phoenix, Arizona 85017

This certification plan reads as follows:

The chief Audiovisual Media Specialist shall be a staff member who is directly responsible on a professional level for the audiovisual learning resources program in a school, school system, or regional center.

The following requirements must be met for certification as an Audiovisual Media Specialist:

I. Requirements for the Chief Audiovisual Media Specialist for a School District or Regional Instructional Materials Center.

A. A Master's Degree (or 30 graduate credits beyond the B.A.)

B. A valid State Teaching Certificate and three years of successful teaching experience.

C. Thirty credit hours in the following areas:

1. 18 credits in Audiovisual courses including methods and selection, production laboratory, administration, and communications.

2. 12 credits in the following areas (at least three areas must be represented in the courses taken);

- a. School administration
- b. Elementary Education
- c. Secondary Education
- d. Supervision of Instruction
- e. Psychology of Learning
- f. Library Science
- g. Statistics and Methods of Research

D. At least two years of experience as an Audiovisual Building Coordinator or equivalent.

E. Allowances

1. Certificated personnel currently administering district or regional audiovisual programs may be granted up to five years to acquire these certification requirements.

II. Requirements for the Building Audiovisual Media Specialist for High Schools and Junior Colleges.

A. Master's Degree (or 30 graduate credits beyond the B.A.)

- B. A valid state teaching certificate.
 - C. Two years of successful teaching experience.
 - D. 20 credit hours in the following areas:
 - 1. 12 credits in Audiovisual courses including methods, selection, production, communication, and administration.
 - 2. 8 credits from:
 - a. Secondary Education
 - b. Elementary Education
 - c. Psychology of Learning
 - d. School Administration
 - e. Research Methods
 - f. Library Science
 - g. Supervision of Instruction
- (At least 3 areas must be represented)

III. Requirements for the Elementary School Building Audiovisual Coordinator

- A. Baccalaureate Degree
- B. A valid State Teaching Certificate and one year of successful teaching experience.
- C. 12 credits in the following areas:
 - 1. 6 credits in Audiovisual courses; evaluation, utilization, production, administration.
 - 2. 6 credits from:
 - a. School Administration
 - b. Elementary Education
 - c. Secondary Education
 - d. Supervision of Instruction
 - e. Psychology of Learning
 - f. Library Science
 - g. Statistics and Methods of Research
- D. Allowances
 - 1. Certificated personnel currently functioning as Audiovisual Building Coordinators may be allowed up to two years to acquire these requirements.

It is expected that, from the discussion surrounding this, or any plan, will come the problems to which we may find solutions. Even the solution to

these problems will be subject to question.

However, these questions will be answered. Education's need for qualified, trained, experienced Audiovisual Educators must be met. Through the provisions of certification this need will be satisfied.

TO: The Commissioner of Education and the Board of Education of
Massachusetts

FROM: The Massachusetts Audio-Visual Association

DATE: December 15, 1967

We, the undersigned, respectfully submit this petition to the Commissioner of Education and the Board of Education, requesting consideration and approval for the addition of certification of Instructional Materials and/or Audio-Visual personnel in the public schools of Massachusetts, to be placed in effect at the earliest possible date.

JUSTIFICATION:

Due to the ever increasing professional and technological advances required of quality education, it is felt that the minimum requirements listed below are urgently needed to standardize and upgrade the field of Instructional Materials Technology in Education as it exists at the present time.

Many of the changes and developments taking place in education include the use of computers, information storage and retrieval systems, data processing equipment, television, teaching machines, programmed learning devices, overhead projection, language laboratories and many other media utilized directly in the teaching learning process. The demands placed on the Instructional Material and/or Audio Visual, by many school systems require him to possess a firm understanding of educational philosophy, psychology of learning, elementary and secondary curriculum, communications theory and a wide variety of technical skills.

Many states are presently working on the problem of certification of Instructional Materials personnel. It would again seem advantageous for

Massachusetts to be among the first to establish minimum standards in this field. States that already have Instructional Materials and/or Audio-Visual certification requirements include: Minnesota, Pennsylvania, Indiana, California and Florida.

The requirements proposed herein are well in accord with and reflect the best thinking of leaders on the national, regional and state level and, the requirements of states already having Instructional Materials and/or Audio Visual certification laws. The proposal requirements only apply to those personnel now holding a full-time Instructional Materials and/or Audio-Visual position. The recommended requirements are as follows:

I. General Requirements:

- A. One certified contract year of teaching experience in a state approved public and/or private school system, exclusive of student teaching.
- B. A Master's Degree with a major in Instructional Materials and/or Audio-Visual Education. (thirty (30) graduate semester hours plus a thesis or thirty-six (36) graduate semester hours exclusive of a thesis.) The thirty(30) or thirty-six(36) graduate semester hours to be fulfilled as specified under Section II. Specific Requirements.

II. Specific Requirements:

Thirty or thirty-six graduate semester hours in Instructional Materials and/or Audio-Visual Education to be distributed as follows:

Required Courses:

A minimum of three graduate semester hours to be completed in each of the following ten categories for a total of 30 to 36 graduate semester hours.

1. Educational Philosophy:

- a. Philosophy of Education
- b. Foundations of Education

2. Psychology:
 - a. Psychology of Learning
 - b. Learning Theory
3. Curriculum:
 - a. Elementary school curriculum
 - b. Secondary school curriculum
 - c. Curriculum development
4. Communications:
 - a. Basic Communications Theory
 - b. Group Dynamics/Human Relations
 - c. Educational Research
5. Administration:
 - a. Design of Instructional Materials and/or Audio-Visual Centers
 - b. Administration of Instructional Materials and/or Audio-Visual Centers
6. Newer Media:
 - a. Computer Technology
 - b. Information storage and retrieval systems
 - c. Data Processing
7. Television:
 - a. Television Production
 - b. Educational Television Workshop
8. Instructional Materials and/or Audio-Visual Production:
 - a. Production Instructional Materials and/or Audio-Visual Materials
 - b. 8mm or 16mm Motion Picture Production
 - c. Basic Photography
9. Basic Utilization:
 - a. Use of Instructional Materials and/or Audio-Visual Materials in Education
 - b. Laboratory in Instructional Materials and/or Audio-Visual Education
10. Library Science:
 - a. Library Administration
 - b. School Library Administration
 - c. Basic Library Science

NOTE: A Master's Degree, C.A.G.S., Ed of D. or Ph.D., with a major in Instructional Materials and/or Audio Visual Education will be excepted in lieu of the previously stated requirements.

(COPY)

April 16, 1968

Dr. William C. Gaige
Director of Research
Massachusetts Advisory Council on Education
182 Tremont Street - 13th Floor
Boston, Massachusetts 02111

Dear Dr. Gaige:

Thank you for your letter of April 15 with the enclosed questionnaire. I hope that you will accept my apologies for neglecting to reply to your earlier request. In all honesty, I feel that I am not qualified to address myself to the teaching profession as a whole, but only to that part of it concerned with audio visual and instructional media personnel.

As far back as 1954 I appointed a committee representing the Massachusetts Audio Visual Association and the various state colleges to make a study of standards for state colleges as far as audio visual education was concerned and also to make certain proposals to the Board of Presidents. This committee also brought out the strong need for audio visual supervisors in school systems being included within the framework of the state certification program. Again in 1966, this Office with the assistance of the Massachusetts Audio Visual Association made a proposal regarding certification which was submitted through the certification office to the Commissioner of Education and Board of Education. I am attaching to this letter a copy of these suggestions as prepared for the Board. I am deeply concerned, as I know the members of the Audio Visual Association are, that the Massachusetts Advisory Council on Education give serious consideration to including audio visual and instructional materials specialists in any revision or expansion of the certification law.

For your information, I am also enclosing a copy of a series of standards on audio visual equipment, materials, and personnel for elementary and secondary schools as prepared by the Association of Chief State Audio Visual Officers at Des Moines in 1965. These standards were generally accepted in principle by the majority of state Departments of Education including our own. Since the publication of these standards, there has been a continuous study made by the Department of Audio Visual Instruction of the N.E.A., and the Association of Chief State Audio Visual Officers, and at the national convention in Houston, certain recommendations were made to expand the standards to include school library facilities. I have one copy of the proposed standards available which I would be glad to let you read

at your leisure if you are interested in doing so. Presumably, the standards submitted in Houston will be sent to the individual state Departments of Education for their approval. I have found that using the 1965 proposals have been extremely helpful to this Office in responding to requests for information from superintendents of schools and I anticipate that the new proposals will be equally acceptable because of the obvious trend throughout the United States to consolidate the services of the school library and the audio visual or instructional media program. In fact, this trend is becoming so evident that in any teacher training program serious consideration should be given to requiring both courses in library science and audio visual education.

Sincerely yours,

Kelsey B. Sweatt
Coordinator of Audio Visual Services

TO: Miss Louise B. Forsyth, President. M.S.C.A.

FROM: Mr. Albert C. Williamson, Chairman, Professional Development Committee

SUBJECT: Report of Progress

DATE: January 26, 1968

The article "Certification - a Problem" which recently appeared in the Counselor's Notebook summarized, in general, the highlights of the activities of the Professional Development Committee to date.

This report will merely add some detail to the information presented in the notebook, and, for the sake of brevity, will use outline form when possible.

1. The January 16th meeting of the P.D.C. was attended by sixteen (16) committee members, two (2) guest consultants and four (4) members of the Advisory Council for Counseling and Guidance.
2. After reviewing letters by Mr. O'Regan and Mr. Williamson and the proposed article, the committee voted unanimously in reference to the matter of Associate Memberships. The vote was negative.
3. Progress reports of sub-committees obtaining recommendations for certification proposals from various groups revealed the following:
 - a. Experienced counselors - survey completed - work being collated.
 - b. New counselors - survey completed - work being collated.
 - c. Counselor educators - survey being carried out by Dr. David Cook, will be ready for February 13th meeting.
 - d. Area associations - discussions completed by some groups already -- others have been planned. Area association representatives requested to forward concise summary to chairman's sub-committee prior to February 13th meeting.
 - e. Advisory Council for Counseling and Guidance - one meeting has already been held with the P.D.C. chairman's sub-committee. (Mr. Robert Archibald, Miss Anne McNally, and Mr. Eugene Prior). The liaison sub-committee for the Advisory Council consists of Dr. William C. Cottle, Mr. Bernard White, Mr. Lee Chapman and Mr. Fred Pompeo, president of the council.

All sub-committee chairman and area representatives will make final reports to the P.D.C. at the February 13th meeting. Final proposals based on review and integration of all accumulated information will be presented to the P.D.C. at the March meeting.

Final recommendations will be forwarded to the Executive Committee of M.S.C.A. prior to the March meeting of that body. (It is anticipated that the final proposals will be forwarded to representatives of the Mass. School Superintendents Association, the Mass. School Principals association and to the Mass. School Committee Association for their reaction, prior to the Annual Meeting of M.S.C.A. in May).

4. Guest consultant, Dr. Garland Fitzpatrick, Connecticut Department of Education, gave an excellent presentation, outlining the approach used in revising the certification requirements for counselors in Connecticut.

The revision was initiated because of a change in attitude toward counselors noted during school evaluations by visiting accreditation teams.

Prior to 1957 students had positive, administrators had negative attitudes toward counselors. Later, the exact opposite in attitudes was noted. Investigation results indicated a shift in the counselor's interpretation of his role from being student oriented to being teaching-administrator oriented. Students resented this.

Students were found to want:

- a. More personal attention from counselors
- b. Counselors to know more (be walking encyclopedias)
- c) Counselors to be less preoccupied with the college bound student

In Connecticut the certification study approach was almost the reverse of the one used by the P.D.C. of M.S.C.A. A large number of professional people (160) were paid \$100 each to participate in a study of certification standards. The results were fed to the Connecticut Department of Education which prepared alternate proposals for certification. These proposals were presented to the Connecticut P. & G. Association which accepted one proposal but rejected the other. The second proposal was rejected because:

- a. It contained no requirement for teacher certification and
- b. It was felt that the training institutions were not in position to supervise practicums involving 1,000 hours of experience.

Dr. Fitzpatrick in retrospect admitted that our approach, having the proposals emanate from the counselors, was a more sound procedure.

A full hour of questions followed Dr. Fitzpatrick's presentation.

5. Mr. John McGrail, Chief Certification officer, Massachusetts Department of Education, gave an excellent talk outlining the reasons why no action had been taken on the 1962 proposal by the Advisory Council for revising certification standards. (Temporary shifting of jobs within the department, decision to review all certification standards after the Willis-Harrington report; setting up of the Massachusetts Advisory Council for Education).

He pointed out that unless the law was changed, teaching certification would be necessary. He felt that the training institutions would not be able to adequately supervise laboratory experience for new counselors (1,500 teacher trainees in Boston schools at the present time, some practice teachers seldom see a representative from the training institution).

Mr. McGrail expressed great willingness to work with M.S.C.A. He feels that M.S.C.A. and the Advisory Council for Counseling and Guidance can have great influence on M.A.C.E., an extension of the Willis-Harrington report

and that M.A.C.E. will have the ear of the legislature.

6. The chairman reported on his attendance at a December 14th meeting of M.A.C.E. and distributed copies of a report on certification by Dr. James F. Baker, Assistant Commissioner, Massachusetts Department of Education.

He also reported on the work being done by the Massachusetts Association of Language Teachers in attempting to upgrade certification standards. They, too, are encouraging discussion of the problem at local area association.

After the December 14th meeting the chairman forwarded a lengthy report of the activities of the P.D.C. to Dr. Lindley Stiles, Director of the Certification Study for M.A.C.E. Dr. Stiles was also presented with a copy of all study materials prepared for use by the P.D.C.

The chairman will attend meetings sponsored by M.A.C.E. on February 3 and February 6.

The P.D.C. had voted unanimously to invite Senator Kevin A. Harrington to the meeting at Framingham North High School on January 16th.

The chairman reports with regret that Senator Harrington, perhaps due to his busy schedule, failed to attend this most interesting and informative meeting.

December 20, 1967

Dr. Richard M. Millard, Chancellor
Board of Higher Education
100 Cambridge Street
Boston, Massachusetts

Dear Dr. Millard:

The Professional Policies Committee, an elected committee of the Newton Junior College faculty, respectfully requests that the practice of requiring our faculty members to meet the State's secondary school certification requirements be reevaluated by the study committee of the Massachusetts Advisory Council on Education.

Last spring at your office, we discussed the uniqueness of Newton Junior College and one other junior college under School Committee control, in which the faculty is required by law to meet certification requirements. As we know, the qualifications apply specifically to high school teaching. I have discussed this matter with an official of the State Department of Education and believe that this topic is also under discussion between your office and Dr. Kiernan's.

It is the hope of the Committee that the current legislation be amended to exclude Newton Junior College faculty from the current certification practice.

We appreciate your past and continuing assistance in this matter.

Sincerely yours,

George Martins
Member, Professional Policies Committee

GM/bb

CERTIFICATION AND EVALUATION

All members of the faculty at Newton Junior College at the time of their original employment must present a statement of good health, based upon an examination as prescribed by the Commissioner of Public Health of the City of Newton, and signed by a physician approved by the Committee, and appropriate certification by the Massachusetts Department of Education, as required by law.

Today, the responsibility for teacher certification in Massachusetts is vested in the State Department of Education. The Division of Certification and Placement is empowered to enforce, as well as to administer, its standards. It should be emphasized, however, that the state's requirements are minimal, and local communities still have the option of demanding higher standards of experience and educational preparation of their teacher candidates than those required by the state.

At the present time minimum standards for professional appointment at the Newton Junior College are the same as those at the secondary school level, which are:

1. Must be citizens of the United States.
2. Must be in good health.
3. Must be of sound moral character.
4. Must possess a bachelor's degree, or higher earned academic degree, or be graduates of a four-year school approved by the Massachusetts Board of Education.
5. Included with each candidate's program of undergraduate (or graduate) work there shall be a minimum of twelve semester hours in education courses, approved for the preparation of secondary school teachers by the Massachusetts State Board of Education, which shall include:
 - a. Not less than two semester hours in supervised practice teaching at the secondary school level.

- b. Courses in two or more of the following areas:
 - Educational Psychology, including Adolescent Growth and Development.
 - Philosophy of Education.
 - Methods and Materials in Secondary Education.
 - Curriculum Development in Secondary Education.
- c. At least eighteen semester hours of preparation in the major subject field or fields.

All correspondence relative to teacher certification should be addressed to Mr. John P. McGrail, Director, Division of Certification and Placement, State Department of Education, 200 Newbury Street, Boston, Massachusetts. The obligation to obtain certification rests with the individual who desires to teach, not with the school system or with the Department of Education.

II General Instructions and Interpretations Relative to Chapter 278 of the Acts of 1951, as further amended by Chapter 530 of the Acts of 1952 and Chapter 264 of the Acts of 1953 and the Requirements of the Board of Education Pursuant Thereto.

1. The requirements for certificates established by the Board of Education shall be considered to be minimum requirements and nothing stated herein shall be construed to mean that local school committees may not impose higher requirements.
2. Any person employed or formerly employed by a Massachusetts School Committee prior to July 26, 1951, is exempt from the provisions of Section 38G of Chapter 71 of the General Laws.
3. Three years of successful teaching, supervisory or administrative experience, appropriate to any certificate, may be accepted by the Board of Education in lieu of courses required for the certificate.
4. The certificates issued by the Board of Education under these regulations shall be permanent certificates.
5. A "temporary substitute teacher" as used in the law, is interpreted to mean one who has been appointed or elected to serve for less than a full school year.
6. The term "normal school" as used in the law shall be interpreted to mean four-year normal school courses, effective September 1, 1956.
7. Normal schools must be approved by the Board of Education. Normal schools outside Massachusetts may be approved by the Board if they are approved by the Department of Education of the State in which they are operated.
8. Courses in education must be so listed in official publications or so described in official letters of the college or university.
9. The two semester hours of student teaching required for teaching certificates beginning September 1, 1956, is interpreted to mean only that part of the student teaching program which is devoted to student participation and independent practice.
10. One semester of teaching under supervision will be acceptable in place of the practice teaching requirement.
11. Requirements for teaching in a public junior college shall be the same as the requirements for teaching in secondary schools.
12. It is permissible for a school committee to allow a teacher to teach outside the provisions of the certificate, provided that such teaching does not exceed 20 per cent of the full teaching program.

13. A secondary school teacher may not devote more than 50 per cent of teaching time to subjects in which he or she is not qualified to teach as a major.
14. The Board of Education reserves the right to revise these requirements if the need arises, on due notice given to school authorities in advance.

APPENDIX

The Commonwealth of Massachusetts
Department of Education
182 Tremont Street
Boston, Massachusetts

GENERAL LAWS RELATING TO EDUCATION

Chapter 71

AN ACT RELATIVE TO STANDARDS OF CERTIFICATION OF CERTAIN TEACHERS IN THE MASSACHUSETTS PUBLIC SCHOOLS.

SECTION 38G. The board of education, hereinafter referred to as the board, shall grant certificates upon application to teachers, principals, supervisors, directors, school librarians, superintendents, and assistant superintendents of schools who furnish the board with satisfactory proof that they (1) are American citizens, (2) are in good health, provided that no applicant shall be disqualified because of his blindness, (3) are of sound moral character, (4) possess a bachelor's degree or an earned higher academic degree or are graduates of a normal school approved by the board, and (5) meet such requirements as to courses of study and semester hours therein as may be established and put into effect by said board; provided, nevertheless, that no requirements respecting such courses of study and semester hours therein shall take effect prior to three years subsequent to their promulgation by said board. The board may adopt such rules and regulations as may be necessary for the proper conduct of its duties in granting such certificates.

No person shall be eligible for employment by a school committee as a teacher, principal, supervisor, director, superintendent or assistant superintendent unless he has been granted a certificate by the board; provided, however, that nothing herein shall be construed to prevent a school committee from prescribing additional qualifications; and provided, further, that a school committee may upon its request be exempt from the requirements

if this section by the department for any one school year when compliance therewith would in the opinion of the department constitute a great hardship in the securing of teachers for the schools of a town. This section shall not apply to trade, vocational, temporary substitute teachers or exchange teachers.

(Last amended 1960, Chapter 333, section 1).

(Section 2 of 278, 1951). This act shall not apply to persons employed or formerly employed by Massachusetts school committees on the effective date of this act. (278, 1951; 530, 1952; 264, 1953).

II. General Instructions and Interpretations Relative to Chapter 278 of the Acts of 1951, as further amended by Chapter 530 of the Acts of 1952 and Chapter 264 of the Acts of 1953 and the Requirements of the Board of Education Pursuant Thereto.

1. The requirements for certificates established by the Board of Education shall be considered to be minimum requirements and nothing stated herein shall be construed to mean that local school committees may not impose higher requirements.
2. Any person employed or formerly employed by a Massachusetts School Committee prior to July 26, 1951, is exempt from the provisions of Section 38G of Chapter 71 of the General Laws.
3. Three years of successful teaching, supervisory or administrative experience, appropriate to any certificate, may be accepted by the Board of Education in lieu of courses required for the certificate.
4. The certificates issued by the Board of Education under these regulations shall be permanent certificates.
5. A "temporary substitute teacher" as used in the law, is interpreted to mean one who has been appointed or elected to serve for less than

one full school year.

6. The term "normal school" as used in the law shall be interpreted to mean four-year normal school courses, effective September 1, 1956.
7. Normal schools must be approved by the Board of Education. Normal schools outside Massachusetts may be approved by the Board if they are approved by the Department of Education of the State in which they are operated.
8. Courses in education must be so listed in official publications or so described in official letters of the college or university.
9. The two semester hours of student teaching required for teaching certificates beginning September 1, 1956, is interpreted to mean only that part of the student teaching program which is devoted to student participation and independent practice.
10. One semester of teaching under supervision will be acceptable in place of the practice teaching requirement.
11. Requirements for teaching in a public junior college shall be the same as the requirements for teaching in secondary schools.
12. It is permissible for a school committee to allow a teacher to teach outside the provisions of the certificate, provided that such teaching does not exceed 20 per cent of the full teaching program.
13. A secondary school teacher may not devote more than 50 per cent of teaching time to subjects in which he or she is not qualified to teach as a major.
14. The Board of Education reserves the right to revise these requirements if the need arises, on due notice given to school authorities in advance
15. A. Any certificate issued by the Board of Education may be revoked for cause. The Board may find cause for revocation by a majority vote at any regular or special meeting if it is found that:

- a. The certificate was obtained through fraud or the misrepresentation of a material fact.
 - b. The holder of the certificate is professionally unfit to perform the duties for which certification was granted. Current membership in the Communist Party shall be deemed conclusive evidence of professional unfitness.
 - c. The holder of a certificate is convicted in a court of law of seditious or subversive activity in violation of a state or federal law, or of a crime involving moral turpitude, or of any other crime of such nature that in the opinion of the Board of Education the person so convicted discredits the profession or brings into disrepute the Massachusetts certificate.
- B. No certificate shall be revoked unless:
- a. The holder is notified by registered mail to the last address listed by the holder in the Division of Teacher Certification and Placement of the reasons for revocation and attached thereto a copy of this regulation. Such notification must issue at least 30 days prior to the effective date of revocation. The holder of the certificate shall have 21 days from the date of the notification in which to request, in writing, a hearing before the Board of Education on the issue of revocation. If such a request for a hearing is received by the Board of Education, the Board shall set a date for such a hearing not later than 90 days after the date of the original notice of revocation. The holder of a certificate may be represented by counsel at such hearing. The hearing will be private but the certificate holder may present such witnesses as may be necessary to rebut the causes alleged for revocation.
 - b. Within 30 days of the date of the hearing the Board of Education shall vote on the question of revocation of the certificate. If two-thirds of the membership of the Board shall vote in the affirmative the holder's certificate shall be revoked. The holder shall be notified of the result of the vote by registered mail to the last address known to the Division of Teacher Certification and Placement.
- C. Notice of revocation of certification shall be sent to all Massachusetts superintendents of schools and to the certification officers of every state within 10 days of the effective date of such revocation.
- D. No person whose certificate has been revoked under these regulations may again be certified in Massachusetts except by two-thirds vote of membership of the Board of Education.

Approved by the Board of Education at the Board Meeting of October 27, 1959.

TEACHER CERTIFICATIONSection 38 G. Certification of teachers by board of education.Requirements.

The second paragraph of section 38G of chapter 71 of the General Laws, as appearing in section 1 of chapter 20 of the acts of 1960, is hereby amended by striking out the last sentence and inserting in place thereof the following two sentences: --This section shall not apply to trade, vocational, temporary substitute teachers, or exchange teachers, or to teaching or administrative interns from an institution of higher learning in the Commonwealth, provided approval for the employment of such personnel shall be granted by the department under such rules and regulations as it may adopt. As used in this section "teaching or administrative intern" shall be a student who has completed his practice teaching requirements and seeks additional experience in part-time teaching or administrative positions. (Last am. 1965, 172).

Section 38G of chapter 71 of the General Laws, as most recently amended by section 1 of chapter 333 of the acts of 1960, is hereby further amended by adding the following paragraph: --

Upon the request of a school committee, any person who is not an American citizen but who otherwise qualifies under the first paragraph of this section may be certified by the board to the position of teacher to teach only the language of his country of origin; provided, that such person is legally present in the United States and presents to the board a copy of his declaration of intention to become a citizen of the United States, certified by the clerk of the court in which it was filed or a certificate from the Immigration and Naturalization Service of the United

States showing that he has declared his intention to become such citizen. Any certificate issued under this paragraph shall not be valid after six years from the date of issue, and such certificate shall not be renewable. Service by a teacher certified under this paragraph shall not be counted as service in acquiring the status of serving at the discretion of the school committee, as provided in section forty-one.

(Last am. 1965, 345).